

Grizzly **Industrial, Inc.**®

MODEL G1033X 20" 5HP SPIRAL CUTTERHEAD PLANER OWNER'S MANUAL



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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE
OR FORM WITHOUT THE WRITTEN APPROVAL OF GRIZZLY INDUSTRIAL, INC.**
FOR MODELS MANUFACTURED SINCE 4/10 #BL7969 PRINTED IN CHINA



WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.

Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.

The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.



WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

Table of Contents

- INTRODUCTION 2**
 - Manual Accuracy 2
 - Contact Info..... 2
 - Identification..... 3
 - Machine Data Sheet 4

- SECTION 1: SAFETY 6**
 - Safety Instructions for Machinery 6
 - Additional Safety for Planers 8

- SECTION 2: CIRCUIT REQUIREMENTS 9**
 - 220V Single-Phase 9

- SECTION 3: SET UP 10**
 - Items Needed for Set Up 10
 - Unpacking 10
 - Inventory 11
 - Hardware Recognition Chart 12
 - Cleanup..... 13
 - Site Considerations..... 14
 - Moving & Placing Planer..... 15
 - Extension Wings 15
 - Handwheel 16
 - Dust Hood..... 16
 - Gearbox Oil Level..... 17
 - Connecting to Power 17
 - Test Run 17
 - Tighten V-Belts 18
 - Recommended Adjustments..... 18

- SECTION 4: OPERATIONS 19**
 - Operation Safety 19
 - Basic Operation 19
 - Operation Tips 20
 - Feed Speed 20
 - Bed Rollers 21

- SECTION 5: ACCESSORIES 22**

- SECTION 6: MAINTENANCE..... 24**
 - Schedule 24
 - Cleaning..... 24
 - V-Belts 24
 - Lubrication 25

- SECTION 7: SERVICE 26**
 - Troubleshooting 26
 - Rotating/Changing Carbide Cutters..... 28
 - Chain Tension..... 29
 - Table Parallelism 29
 - Internal Component Heights 31
 - Spring Tension..... 34
 - Chip Deflector Positioning 34
 - Scale Calibration..... 35
 - Anti-Kickback Fingers 35
 - Pulley Alignment 36
 - Electrical Components..... 37
 - Wiring Diagram 38
 - Headstock Parts Breakdown 39
 - Table Parts Breakdown 42
 - Stand/Motor Parts Breakdown..... 44
 - Labels & Cosmetic..... 46

- WARRANTY AND RETURNS 49**

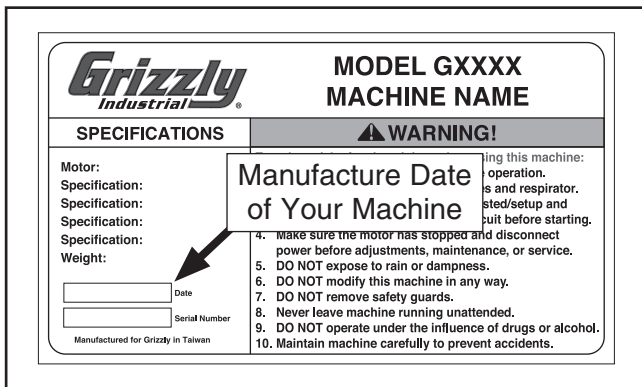
INTRODUCTION

Manual Accuracy

We are proud to offer this manual with your new machine! We've made every effort to be exact with the instructions, specifications, drawings, and photographs of the machine we used when writing this manual. However, sometimes we still make an occasional mistake.

Also, owing to our policy of continuous improvement, **your machine may not exactly match the manual**. If you find this to be the case, and the difference between the manual and machine leaves you in doubt, check our website for the latest manual update or call technical support for help.

Before calling, find the manufacture date of your machine by looking at the date stamped into the machine ID label (see below). This will help us determine if the manual version you received matches the manufacture date of your machine.



For your convenience, we post all available manuals and manual updates for free on our website at www.grizzly.com. Any updates to your model of machine will be reflected in these documents as soon as they are complete.

Contact Info

We stand behind our machines. If you have any service questions, parts requests or general questions about the machine, please call or write us at the location listed below.

Grizzly Industrial, Inc.
1203 Lycoming Mall Circle
Muncy, PA 17756
Phone: (570) 546-9663
E-Mail: techsupport@grizzly.com

We want your feedback on this manual. If you can take the time, please email or write to us at the address below and tell us how we did:

Grizzly Industrial, Inc.
%o Technical Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com



Identification

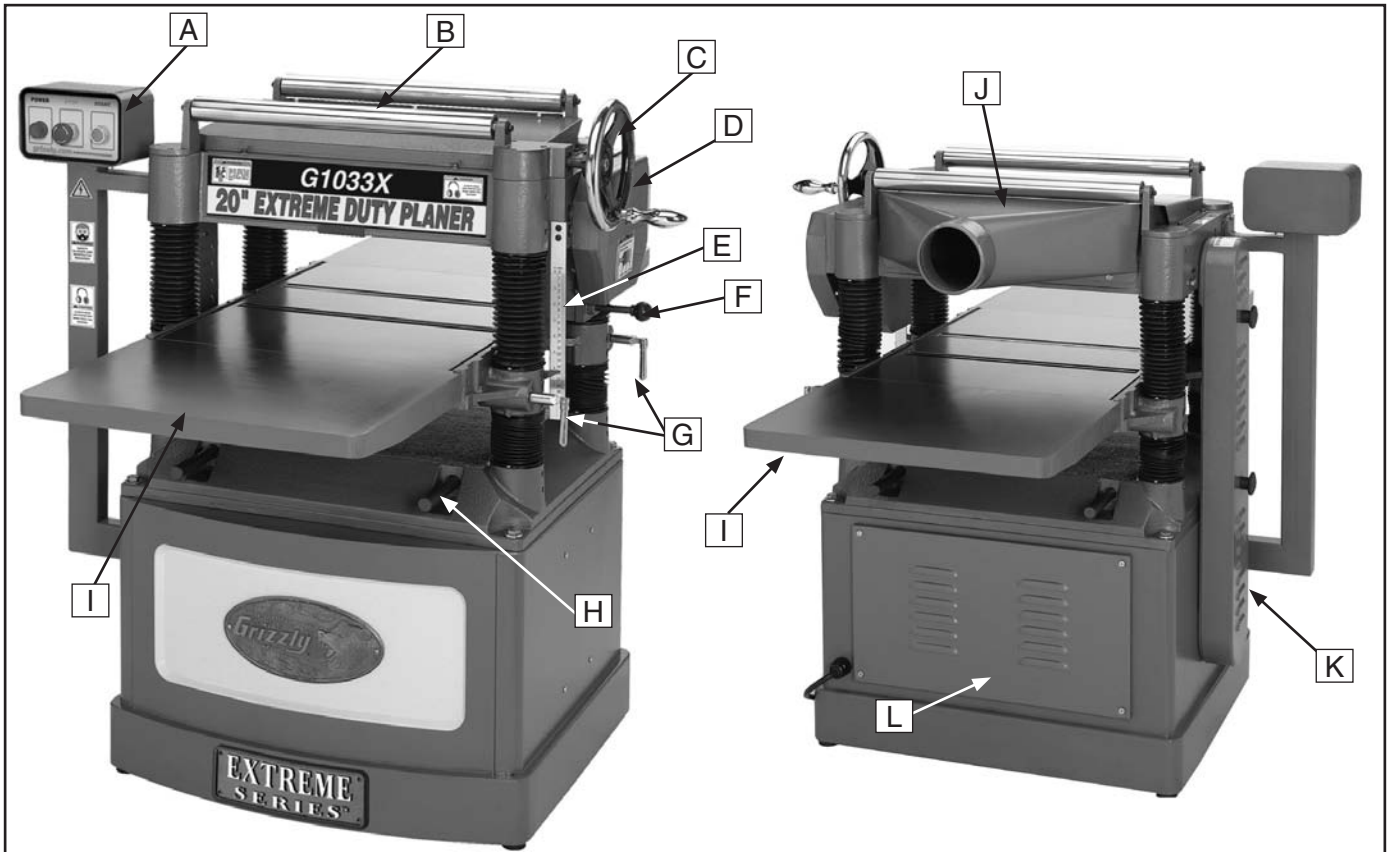


Figure 1. G1033X identification.

- A. Control Box and Panel
- B. Return Rollers
- C. Table Height Handwheel
- D. Gearbox
- E. Table Height Scale
- F. Speed Control Knob
- G. Table Locks
- H. Lifting Bar
- I. Extension Wing
- J. Dust Hood
- K. V-Belt Cover
- L. Motor and Magnetic Switch Access Panel





MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G1033X 20" 5 HP SPIRAL CUTTERHEAD PLANER

Product Dimensions:

Weight..... 875 lbs.
 Length/Width/Height..... 56 x 39 x 41 in.
 Foot Print (Length/Width)..... 28 x 22 in.

Shipping Dimensions:

Type..... Wood Crate
 Content..... Machine
 Weight..... 909 lbs.
 Length/Width/Height..... 45 x 30 x 46 in.

Electrical:

Switch..... Magnetic with Thermal Overload Protection
 Switch Voltage..... 220V
 Cord Length..... 10 ft.
 Cord Gauge..... 10 gauge
 Minimum Circuit Size..... 30 amp
 Plug Included..... No

Motors:

Main

Type..... TEFC Capacitor Start Induction
 Horsepower..... 5 HP
 Voltage..... 220V
 Prewired..... 220V
 Phase..... Single
 Amps..... 23A
 Speed..... 3450 RPM
 Cycle..... 60 Hz
 Number Of Speeds..... 1
 Power Transfer Triple V-Belt Drive
 Bearings..... Shielded and Lubricated

Main Specifications:

Operation Info

Max. Cut Width..... 20 in.
 Min. Stock Length..... 7 in.
 Min. Stock Thickness..... 1/4 in.
 Max. Stock Thickness..... 8-5/8 in.
 No. Of Cuts Per Inch..... 83, 104
 No. Of Cuts Per Minute..... 20000
 Cutterhead Speed..... 5000 RPM
 Planing Feed Rate..... 16, 20 FPM
 Max. Cut Depth Planing Full Width..... 5/64 in.
 Max. Cut Depth Planing 6 Inch Wide Board..... 1/8



Cutterhead Info

Cutterhead Type..... Spiral
 Cutterhead Dia..... 3-1/4 in.
 No. Of Cutter Spirals..... 4
 No. Of Indexable Cutters..... 96
 Cutter Insert Type..... 30 deg. Indexable Carbide
 Cutter Insert Size Length..... 15 mm
 Cutter Insert Size Width..... 15 mm
 Cutter Insert Size Thickness..... 2.5 mm

Table Info

Table Movement..... 8-1/2 in.
 Table Bed Size Length..... 56 in.
 Table Bed Size Width..... 20 in.
 Table Bed Size Thickness..... 2-1/4 in.
 No. Of Bed Rollers..... 2
 Floor To Table Height..... 26 - 34 in.

Construction

Table Construction..... Precision Ground Cast Iron
 Body Construction..... Cast Iron
 Cutterhead Assembly Construction..... Steel
 Infeed Roller Construction..... Spiral Serrated Steel
 Outfeed Roller Construction..... Machined Steel
 Paint..... Powder Coated

Other

Table Locks..... Two Positive
 Measurement Scale..... Inch and Metric
 No. Of Dust Ports..... 1
 Dust Port Size..... 5 in.
 Mobile Base..... G7315Z

Other Specifications:

ISO Factory ISO 9001
 Country Of Origin China
 Warranty 1 Year
 Serial Number Location ID Label
 Assembly Time 2 hours

Features:

- Cast Iron Extension Tables
- Inch and Metric Measurement Scale
- Two Adjustable Bed Rollers
- Two Speed Automatic Feed
- Anti-Kickback Fingers Prevent Board From Backing Up



SECTION 1: SAFETY


WARNING

For Your Own Safety, Read Instruction Manual Before Operating this Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures.

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, **WILL** result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

 **CAUTION** Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE This symbol is used to alert the user to useful information about proper operation of the machine.

WARNING

Safety Instructions for Machinery

- 1. READ ENTIRE MANUAL BEFORE STARTING.** Operating machine before reading the manual greatly increases the risk of injury.
- 2. ALWAYS USE ANSI APPROVED SAFETY GLASSES WHEN OPERATING MACHINERY.** Everyday eyeglasses only have impact resistant lenses—they are NOT safety glasses.
- 3. ALWAYS WEAR A NIOSH APPROVED RESPIRATOR WHEN OPERATING MACHINERY THAT PRODUCES DUST.** Most types of dust (wood, metal, etc.) can cause severe respiratory illnesses.
- 4. ALWAYS USE HEARING PROTECTION WHEN OPERATING MACHINERY.** Machinery noise can cause permanent hearing loss.
- 5. WEAR PROPER APPAREL. DO NOT** wear loose clothing, gloves, neckties, rings, or jewelry that can catch in moving parts. Wear protective hair covering to contain long hair and wear non-slip footwear.
- 6. NEVER OPERATE MACHINERY WHEN TIRED OR UNDER THE INFLUENCE OF DRUGS OR ALCOHOL.** Be mentally alert at all times when running machinery.



WARNING

Safety Instructions for Machinery

7. **ONLY ALLOW TRAINED AND PROPERLY SUPERVISED PERSONNEL TO OPERATE MACHINERY.** Make sure operation instructions are safe and clearly understood.
8. **KEEP CHILDREN/VISITORS AWAY.** Keep all children and visitors away from machinery. When machine is not in use, disconnect it from power, lock it out, or disable the switch to make it difficult for unauthorized people to start the machine.
9. **UNATTENDED OPERATION.** Leaving machine unattended while its running greatly increases the risk of an accident or property damage. Turn machine **OFF** and allow all moving parts to come to a complete stop before walking away.
10. **DO NOT USE IN DANGEROUS ENVIRONMENTS.** DO NOT use machinery in damp, wet locations, or where any flammable or noxious fumes may exist.
11. **KEEP WORK AREA CLEAN AND WELL LIGHTED.** Clutter and dark shadows may cause accidents.
12. **USE A GROUNDED POWER SUPPLY RATED FOR THE MACHINE AMPERAGE.** Grounded cords minimize shock hazards. Operating machine on an incorrect size of circuit increases risk of fire.
13. **ALWAYS DISCONNECT FROM POWER SOURCE BEFORE SERVICING MACHINERY.** Make sure switch is in OFF position before reconnecting.
14. **MAINTAIN MACHINERY WITH CARE.** Keep blades sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
15. **MAKE SURE GUARDS ARE IN PLACE AND WORK CORRECTLY BEFORE USING MACHINERY.**
16. **REMOVE CHUCK KEYS OR ADJUSTING TOOLS.** Make a habit of never leaving chuck keys or other adjustment tools in/on the machine—especially near spindles!
17. **DAMAGED MACHINERY.** Check for binding or misaligned parts, broken parts, loose bolts, other conditions that may impair machine operation. Always repair or replace damaged parts before operation.
18. **DO NOT FORCE MACHINERY.** Work at the speed for which the machine or accessory was designed.
19. **SECURE WORKPIECE.** Use clamps or a vise to hold the workpiece when practical. A secured workpiece protects your hands and frees both hands to operate the machine.
20. **DO NOT OVERREACH.** Maintain stability and balance at all times when operating machine.
21. **MANY MACHINES CAN EJECT WORKPIECES TOWARD OPERATOR.** Know and avoid conditions that cause the workpiece to "kickback."
22. **STABLE MACHINE.** Machines that move during operations greatly increase the risk of injury and loss of control. Verify machines are stable/secure and mobile bases (if used) are locked before starting.
23. **CERTAIN DUST MAY BE HAZARDOUS** to the respiratory systems of people and animals, especially fine dust. Be aware of the type of dust you are exposed to and always wear a respirator designed to filter that type of dust.
24. **EXPERIENCING DIFFICULTIES.** If at any time you are experiencing difficulties performing the intended operation, stop using the machine! Contact our Technical Support Department at (570) 546-9663.



WARNING

Additional Safety for Planers

- 1. INSTRUCTION MANUAL:** This machine presents significant safety hazards to untrained users. Read/understand this entire manual before starting the planer.
- 2. INFEEED CLEARANCE SAFETY:** The infeed roller is designed to pull material into the cutterhead. Always keep hands, clothing, and long hair away from the infeed roller during operation to prevent serious injury.
- 3. BODY POSITION WHILE OPERATING:** The workpiece may kick out during operation. To avoid getting hit, stand to the side of the planer during the entire operation.
- 4. PLANING CORRECT MATERIAL:** Planing materials not designed for this planer creates a hazard for yourself and the machine. Only plane natural wood stock with this planer. DO NOT plane MDF, plywood, laminates, or other synthetic or man-made products.
- 5. GRAIN DIRECTION:** Planing across the grain is hard on the planer and may cause the workpiece to kick out. Always plane in the same direction or at a slight angle with the wood grain.
- 6. CLEAN STOCK:** Planing stock with nails, staples, or loose knots MAY cause debris to kick out at the operator and WILL damage your cutters when they contact the cutterhead. Always thoroughly inspect and prepare stock to avoid these hazards.
- 7. CUTTING LIMITATIONS:** The planer may kick out a workpiece at the operator or be damaged if pushed beyond these limits:
 - Maximum Depth of Cut..... $\frac{5}{64}$ "
 - Minimum Board Length..... $7\frac{1}{2}$ "
 - Minimum Board Thickness $\frac{1}{4}$ "
 - Maximum # of Boards at One Time..... 1
- 8. LOOKING INSIDE PLANER:** Wood chips fly around inside the planer at a high rate of speed. DO NOT look inside the planer or remove guards/covers during operation.
- 9. REMOVING JAMMED WORKPIECES:** Attempting to remove jammed workpieces while the planer is running may cause serious injury to the operator. Always stop the planer and disconnect power before removing jams.
- 10. DULL/DAMAGED CUTTERS:** The planer may kick out a workpiece at the operator or give poor finish results if it is operated with dull or damaged cutters.
- 11. UNPLUGGING DURING ADJUSTMENTS:** When connected to power, the planer can be accidentally turned **ON**. Always disconnect power when servicing or adjusting the components of the planer.

WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to lessen the possibility of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.



SECTION 2: CIRCUIT REQUIREMENTS

220V Single-Phase

⚠ WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. DO NOT connect the machine to the power source until instructed to do so.

Before placing the machine, consider the availability and proximity of an adequate power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, we strongly recommend that you use a qualified electrician to install a new power supply circuit.

Full Load Amperage Draw

This machine draws the following amps under maximum load:

Amp Draw.....23 Amps

Power Supply Circuit Requirements

The power supply circuit for your machine **MUST** be grounded and rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

Minimum Circuit Size.....30 Amp

Power Connection Device

The type of plug required to connect your machine to power depends on the type of service you currently have or plan to install. We recommend using the plug shown in **Figure 2**.

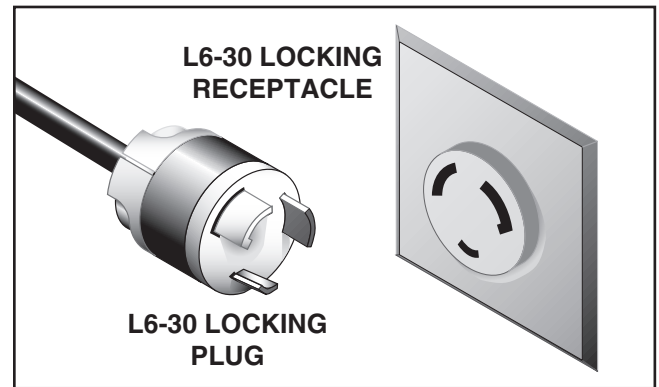


Figure 2. NEMA L6-30 plug and receptacle.

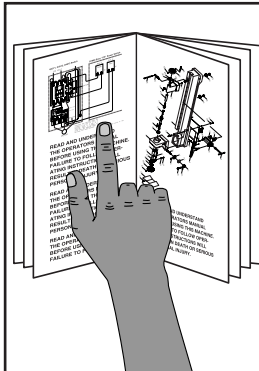
Extension Cords

Extension cords cause voltage drop, which may damage electrical components and shorten motor life. Therefore, to minimize machine damage, only use an extension cord if absolutely necessary, always use the shortest cord available, and make sure to follow the requirements below:

Minimum Gauge 10 AWG
Maximum Length..... 50 ft.

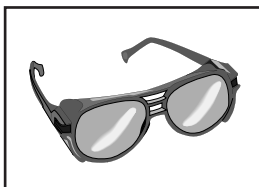


SECTION 3: SET UP



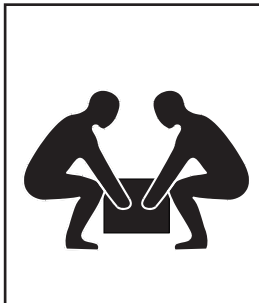
!WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!



!WARNING

Wear safety glasses during the entire setup process!



!WARNING

This machine and its components are very heavy. Get lifting help and use power lifting equipment such as a forklift to move the machine.

Items Needed for Set Up

The following items are needed to complete the set up process, but are not included with your machine:

Description	Qty
• Straightedge 4' (or longer)	1
• Rotacator (see Page 21)	1
• Phillips Screwdriver	1
• Flat Head Screwdriver	1
• Forklift.....	1
• Assistant for Lifting Help	1

Unpacking

Your machine was carefully packaged for safe transportation. Remove the packaging materials from around your machine and inspect it. If you discover the machine is damaged, *please immediately call Customer Service at (570) 546-9663 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, inventory the contents.



Inventory

After all the parts have been removed from the crate, you should have the following items:

Box Inventory (Figure 3)	Qty
A. Planer Unit.....	1
B. Dust Hood	1
C. Table Extension Wings.....	2
D. Handwheel	1
E. Hardware and Tools (Not Shown)	
• T-Handle Wrench T-25.....	1
• Torx Drivers T-25	10
• Indexable Carbide Inserts.....	5
• Flat Hd Torx Screws #10-32 x 1/2"	20
• Hex Wrenches 3, 4, 5, 6mm	4
• Wrenches 8/10, 12/14, 17/19	3
• Set Screws M8-1.25 x 20 (Wings)	6
• Hex Bolts M8-1.25 x 25 (Wings)	6
• Handwheel Bushing (Handwheel)	1
• Handwheel Handle (Handwheel)	1
• Hex Nut M12-1.75 (Handwheel)	1
• Flat Washer 12mm (Handwheel)	1
• Key 4 x 4 x 10 (Handwheel).....	1
• Flange Bolts M6-1 x 12 (Dust Hood) ...	6

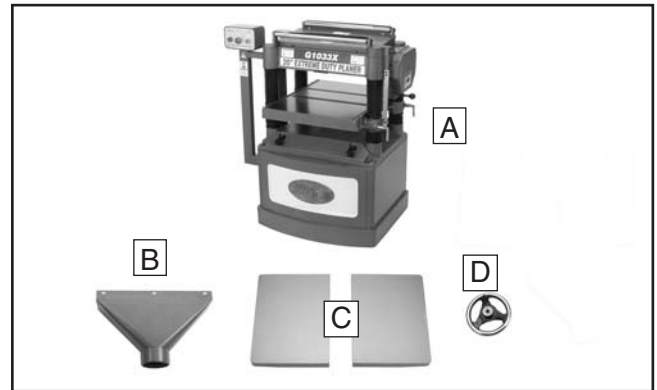


Figure 3. Planer box inventory.

In the event that any nonproprietary parts are missing (e.g. a nut or a washer), we would be glad to replace them, or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

Some hardware/fasteners on the inventory list may arrive pre-installed on the machine. Check these locations before assuming that any items from the inventory list are missing.



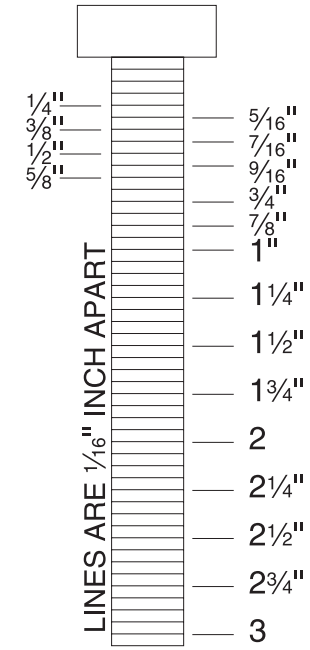
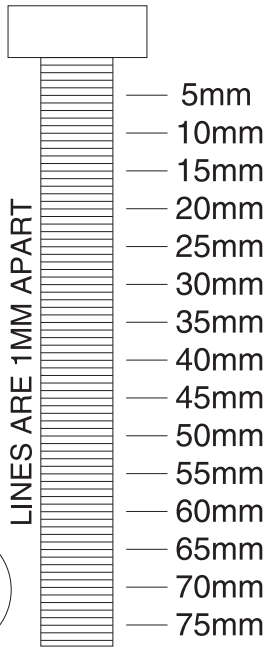
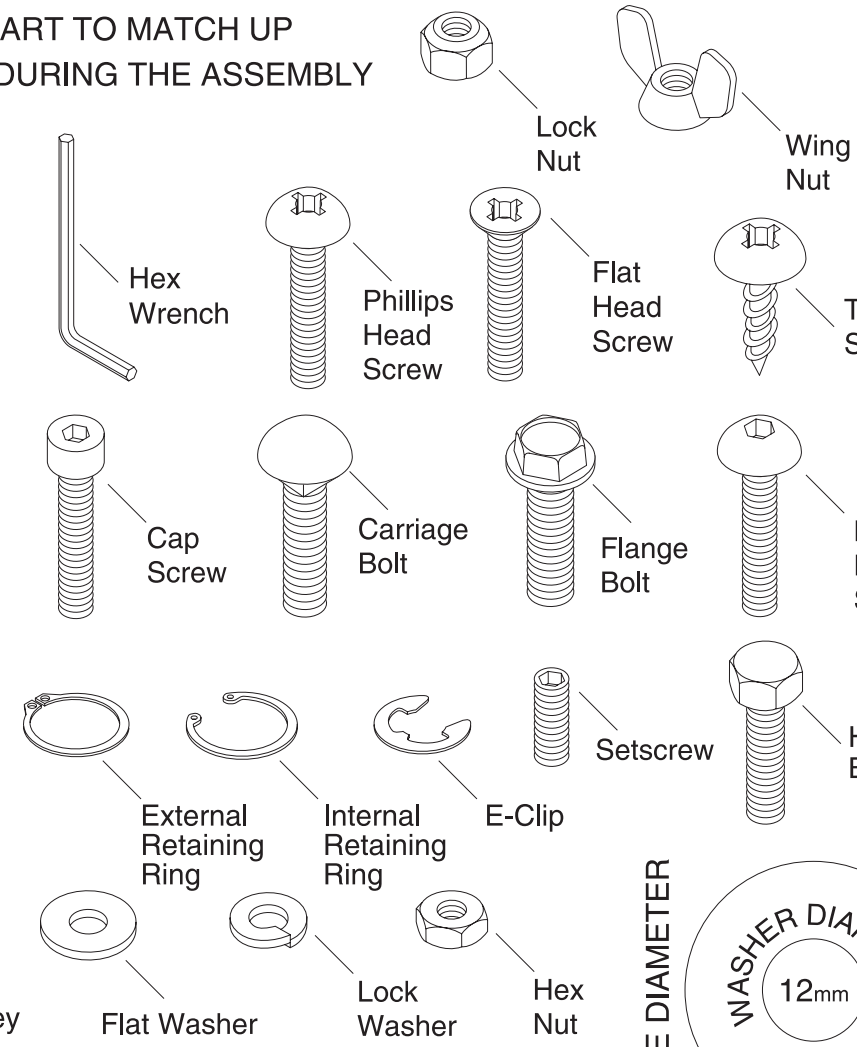
Hardware Recognition Chart

USE THIS CHART TO MATCH UP HARDWARE DURING THE ASSEMBLY PROCESS.

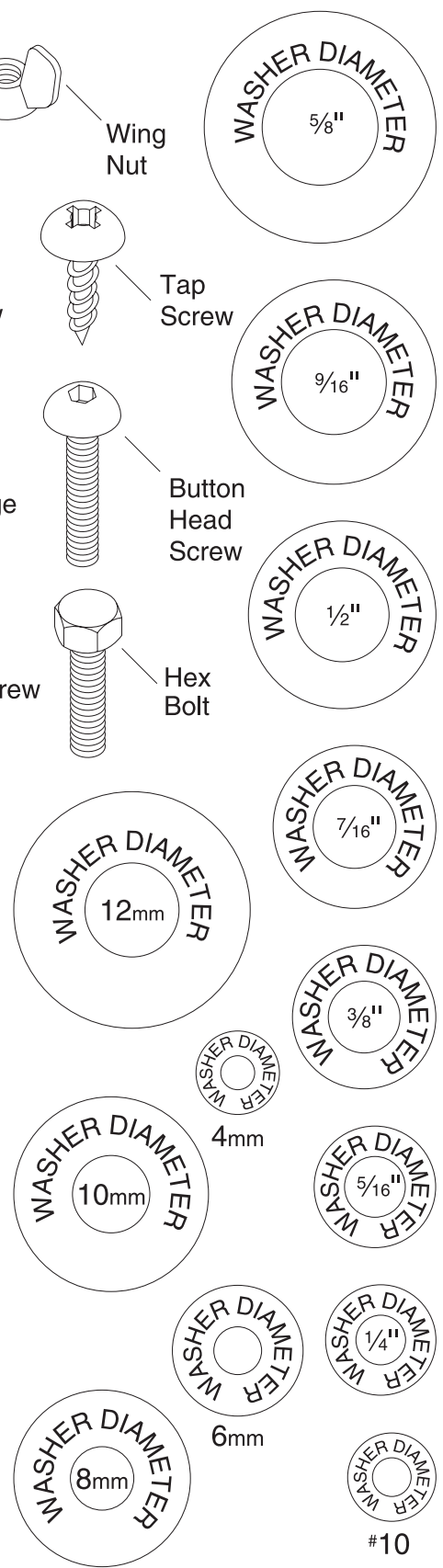
MEASURE BOLT DIAMETER BY PLACING INSIDE CIRCLE

- #10
- 1/4"
- 5/16"
- 3/8"
- 7/16"
- 1/2"

- 4mm
- 6mm
- 8mm
- 10mm
- 12mm
- 16mm



WASHERS ARE MEASURED BY THE INSIDE DIAMETER



Cleanup

The unpainted surfaces of your machine are coated with a heavy-duty rust preventative that prevents corrosion during shipment and storage.

This rust preventative has been your machine's close ally and guardian since it left the factory. If your machine arrived to you free of rust, then be thankful that the rust preventative protected it during its journey...and try to stay thankful as you clean it off, because it can be challenging to remove if you are unprepared and impatient.

Plan on spending some time cleaning your machine. The time you spend doing this will reward you with smooth sliding parts and a better appreciation for the proper care of your machine's unpainted surfaces.

Although there are many ways to successfully remove the rust preventative, these instructions walk you through what works well for us.

Before cleaning, gather the following:

- Disposable Rags
- Cleaner/degreaser (see below)
- Safety glasses & disposable gloves

H9692—Orange Power Cleaner & Degreaser

One of the best cleaners we've found for quickly and easily removing rust preventative.




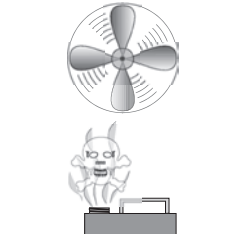
Figure 4. Model H9692 Industrial Orange Power Cleaner/Degreaser (99.9% biodegradable).

Note: *In a pinch, automotive degreasers, mineral spirits or WD•40 can be used to remove rust preventative. Before using these products, though, test them on an inconspicuous area of your paint to make sure they will not damage it.*

Model G1033X (Mfg. since 4/10)



	⚠ WARNING Gasoline and petroleum products have low flash points and can explode or cause fire if used to clean machinery. Avoid using these products to clean machinery.
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	⚠ CAUTION Many cleaning solvents are toxic if inhaled. Minimize your risk by only using these products in a well ventilated area.
--	---

NOTICE Avoid chlorine-based solvents, such as acetone or brake parts cleaner that may damage painted surfaces. Always follow the manufacturer's instructions when using any type of cleaning product.

Basic steps for removing rust preventative:

1. Put on safety glasses and disposable gloves.
2. Coat all surfaces that have rust preventative with a liberal amount of your cleaner/degreaser and let them soak for few minutes.
3. Wipe off the surfaces. If your cleaner/degreaser is effective, the rust preventative will wipe off easily.

Note: *To clean off thick coats of rust preventative on flat surfaces, such as tables, use a PLASTIC paint scraper to scrape off the majority of the coating before wiping it off with your rag. (Do not use a metal scraper or you may scratch your machine.)*

4. Repeat **Steps 2–3** as necessary until clean, then coat all unpainted surfaces with a quality metal protectant to prevent rust.

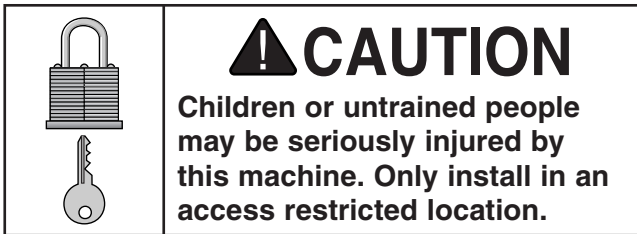
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



Physical Environment

The physical environment where your machine is operated is important for safe operation and the longevity of its components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave access to a means of disconnecting the power source or engaging a lockout/tagout device.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

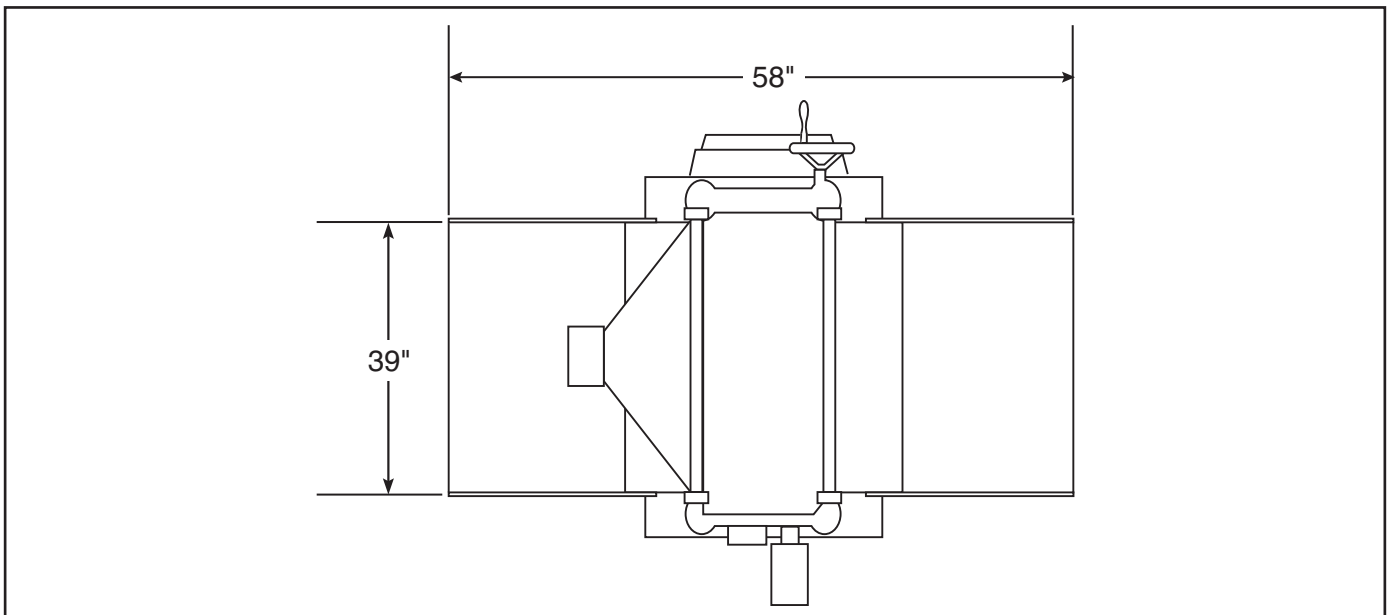
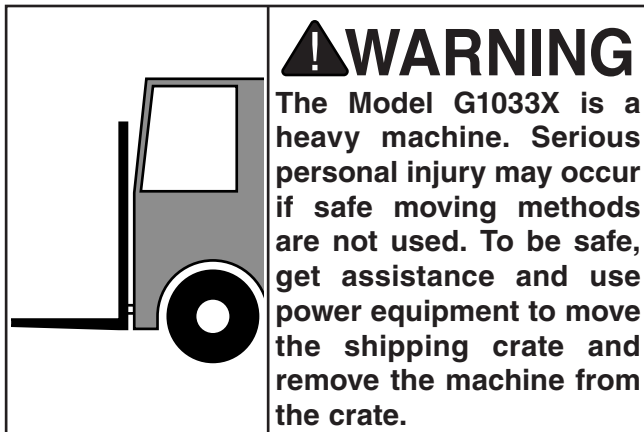


Figure 5. Minimum working clearances.



Moving & Placing Planer



The cabinet stand on the Model G1033X is equipped with lifting bars (see **Page 5**) to lift and place the planer.

When lifting the planer with a forklift, we recommend placing shop rags or cardboard between the forks and cabinet base so you do not scratch the paint.

Figure 6 shows an example of a typical planer with lifting bars being lifted correctly with a forklift.



Figure 6. Example of planer being lifted using forklift.

Extension Wings

Components and Hardware Needed:	Qty
Table Extension Wings.....	2
Hex Bolts M8-1.25 x 25	6
Set Screws M8-1.25 x 20	6

To attach the table extension wings:

1. With the help of an assistant, attach the table extension wings to the planer table (**Figure 7**) with the M8-1.25 x 25 hex bolts. Hand tighten the bolts for now.
2. Install the M8-1.25 x 20 set screws (**Figure 7**) in the holes in the bottom of the wings.

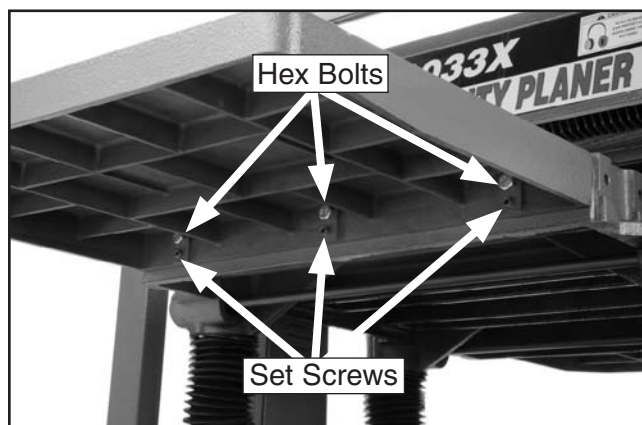


Figure 7. Extension wing fasteners and leveling controls.

3. Using a straightedge as a guide (**Figure 8**) and the set screws for leveling control, position the extension wings even with the table, then fully tighten the hex bolts.



Figure 8. Leveling extension wings and table.



Handwheel

Components and Hardware Needed:	Qty
Handwheel.....	1
Handwheel Bushing	1
Handwheel Handle	1
Hex Nut M12-1.75	1
Flat Washer 12mm	1
Key 4 x 4 x 10.....	1

To install the handwheel:

1. Place the bushing on the handwheel shaft.
2. Insert the key into the shaft keyway.
3. Thread the handle into the handwheel.
4. Place the handwheel on the shaft and secure it with the M12-1.75 hex nut and flat washer, as shown in **Figure 9**.



Figure 9. Installing handwheel on shaft.

Dust Hood

Components and Hardware Needed:	Qty
Dust Hood	1
Flange Bolts M6-1 x 12	6

⚠ CAUTION

DO NOT attach the dust hood if you do not intend to connect your planer to a dust collection system. Accumulated wood chips could cause a malfunction, resulting in personal injury or damage to the planer.

To install the dust hood:

1. Attach the dust hood to the planer with six flange bolts as shown in **Figure 10**.

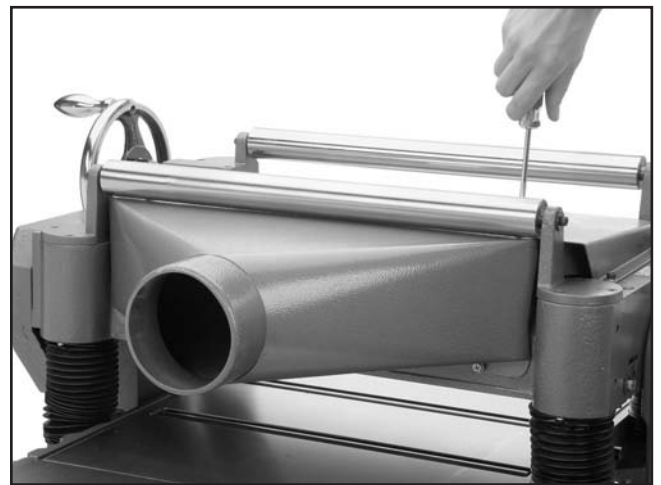


Figure 10. Dust hood attached.

2. If you have a dust collector, attach it to the dust hood now.

Note: To maximize work results and minimize clogging, chipout, etc., use a dust collector with your planer!



Gearbox Oil Level

Before starting your machine for the first time, make sure the gearbox has oil. The proper oil level is just even with the bottom of the fill plug hole. The gearbox uses 80W-90W gear oil.

To check the gearbox oil level:

1. Using a 14mm wrench or socket, remove the gearbox fill plug (**Figure 11**).

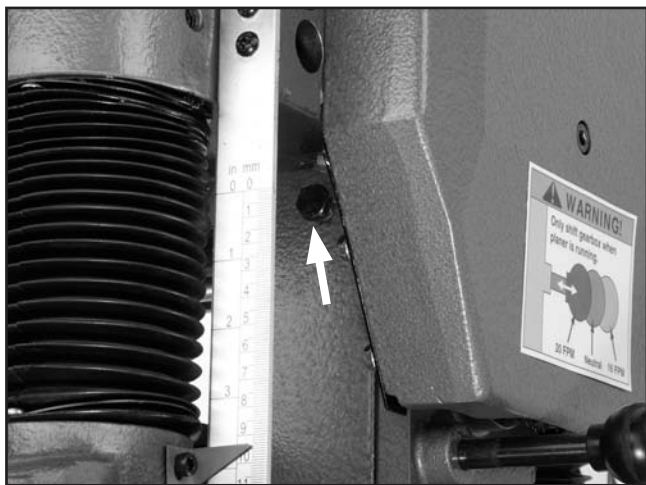


Figure 11. Gearbox fill plug location.

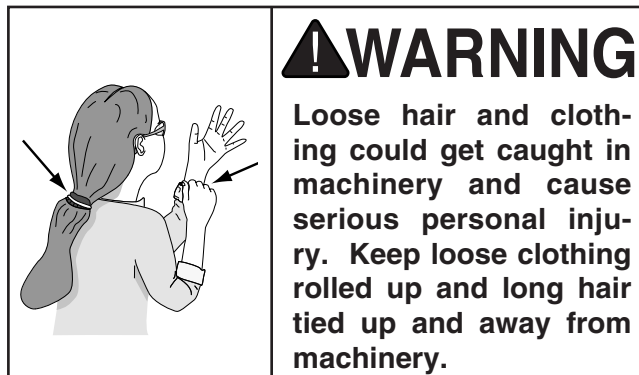
2. Using the short end of a clean 6mm hex wrench, dip it inside the fill hole and remove it.
 - If the end of the hex wrench is coated with oil, then the gearbox oil level is okay. Replace the fill plug and continue with set up.
 - If the end of the hex wrench is not coated with oil, then you need to add more oil. Refer to **Page 24**, "Gearbox" for instructions on how to do this.

Note: Replace the gearbox oil after the first 20 hours of operation. This is a normal break-in procedure.

Connecting to Power

Now is the time to connect your planer to the power source. Make sure you have read **CIRCUIT REQUIREMENTS** on **Page 9**, before doing so.

Test Run



To perform a test run:

1. Read the entire instruction manual, and make sure oil is in the gearbox.
2. Make sure all tools and foreign objects have been removed from the machine.
3. Put on safety glasses, and secure loose clothes or long hair.
4. Press the green button to turn the machine **ON**. The planer should run smoothly with little or no vibration. After verifying this, turn the planer **OFF**.
 - If you suspect any problems, immediately stop the planer by pushing the red button. Troubleshoot/fix any problems before starting the planer again.
 - If you need any help with your planer call our Tech Support at (570) 546-9663.



Tighten V-Belts

The final step in the set up process must be done after approximately 16 hours of operation. During this first 16 hours, the V-belts will stretch and seat into the pulley grooves. After this 16 hours, the V-belts must be tensioned or your belts will slip and burn out. Refer to **Page 23** when you are ready to perform this important adjustment.

Note: *Pulleys and belts run very hot. This is a normal condition. Allow them to cool before making adjustments.*

Note: *A collection of black belt dust at the bottom of the belt housing is a normal during the life of the machine.*

Recommended Adjustments

For your convenience, the adjustments listed below have been performed at the factory and no further setup is required to operate your machine.

However, because of the many variables involved with shipping, some of these adjustments may need to be repeated to ensure optimum cutting results. Keep this in mind as you start to use your new planer.

Step-by-step instructions for these adjustments can be found in SECTION 7: SERVICE ADJUSTMENTS.

1. Table Parallelism (**Page 28**).
2. Chain Drive Tension (**Page 28**).
3. Infeed/Outfeed Roller Height (**Page 30**).
4. Spring Tension (**Page 33**).
5. Chip Breaker Height (**Page 30**).
6. Pressure Bar Height (**Page 30**).
7. Chip Deflector Positioning (**Page 33**).

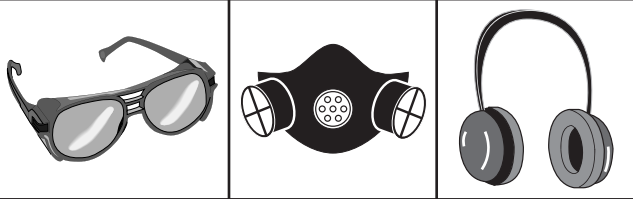


SECTION 4: OPERATIONS

Operation Safety

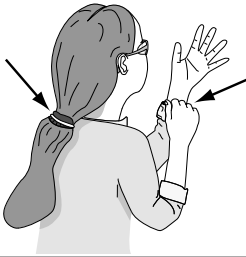
!WARNING

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



!WARNING

Loose hair and clothing could get caught in machinery and cause serious personal injury. Keep loose clothing and long hair away from moving machinery.



NOTICE

If you have never used this type of machine or equipment before, WE STRONGLY RECOMMEND that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Basic Operation

The G1033X table moves approximately $\frac{1}{16}$ " with one turn of the handwheel.

The basic steps of operating the planer are as follows:

1. Put on safety glasses.
2. Unless your workpiece is very flat, surface plane the workpiece on a jointer until it is flat—having the face flat will ensure that it sits flat on the planer table during operation.
3. Adjust the table height to slightly lower than your workpiece height to ensure the first cut is as light as possible (approximately $\frac{1}{32}$ "– $\frac{1}{16}$ ").
4. Start the planer.
5. Place the flat side of the board down on the table, and feed the workpiece through the planer, making sure not to stand directly in front or behind the workpiece to avoid kick-back injury.

—If the cut is too heavy and bogs down the planer, turn the planer **OFF** immediately, allow it to come to a complete stop, remove the workpiece, and repeat **Steps 3–5**.
6. Measure your workpiece thickness and adjust the table height as necessary to take a lighter or heavier pass, depending on your needs. For most wood types, $\frac{1}{16}$ " per pass is a good cutting depth.

Note: Any time you switch directions with the handwheel, there will be a small amount of backlash—so the first crank of the handwheel after switching directions will be slightly less than $\frac{1}{16}$ ". However, as long as you move the handwheel in the same direction during operation, backlash will not be a factor.



Operation Tips

- Inspect lumber for defects, warping, cupping, twisting, and for foreign objects (nails, staples, imbedded gravel, etc.). If you have any question about the quality of your lumber, do not use it. Remember, wood stacked on a concrete floor can have small pieces of stone or concrete pressed into the surface.
- Use the full width of the planer. Alternate between the left, the right, and the middle when feeding lumber into the planer. Your cutters will remain sharp much longer.
- Scrape all glue off of joined boards before planing.
- Plane **ONLY** natural wood fiber. No wood composites (OSB, MDF, particle board, etc.).
- Plane wood with the grain. Never feed end-cut or end-grained lumber into your planer.
- Do not use boards with loose or large knots, splits, crossgrain or other obvious blemishes or defects. They can damage the machine and pose the possibility of operator injury.
- Keep your work area clear.
- When making multiple passes through the planer on long stock, use the stock return rollers on the top of the machine to move the material back to the infeed side of the machine.
- Avoid planing wood with a high water content. Wood with more than 20% moisture content or wood exposed to rain or snow, will plane poorly and cause excessive wear to the cutters and motor. Excess moisture can also hasten rust and corrosion.

Feed Speed

The infeed and outfeed rollers power the stock through the planer while keeping boards flat and providing a consistent rate of movement.

The power feed features high/low feed rates. Use the different feed rates as stated below:

Low Feed Rate Dimensioning Pass
High Feed Rate Finishing Pass

Figure 12 illustrates the three different positions of the feed control knob. Moving the knob toward the machine (Position B) produces the high feed speed (20 FPM) moving away from the machine (Position D) produces the low speed (16 FPM) and moving the knob to the center position (Position C) places the gearbox in neutral.

The speed should only be changed when the machine is running.

NOTICE
Only change the speeds when the planer is running, but **DO NOT** attempt to change speeds during any cutting operations or damage to the gearbox will result.

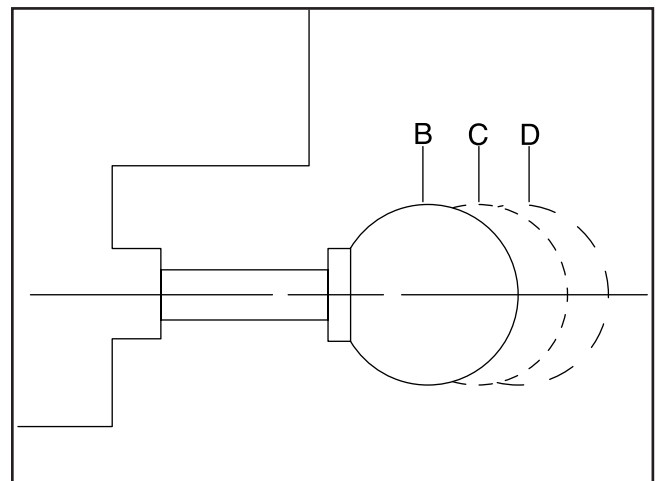


Figure 12. Feed control knob positions.



Bed Rollers

Adjustment Height Range 0.002"–0.020"

Tools Needed:	Qty
Hex Wrench 3mm.....	1
Open End Wrench 14mm.....	1
Rotacator (optional, Page 21)	1

The height of the bed rollers will vary, depending on the type of material you intend to plane, but as a general rule keep the roller height within 0.002"–0.020" above the table. When planing rough stock, set the rollers high to keep the lumber from dragging along the bed. When planing milled lumber, set the rollers low to help minimize snipe.

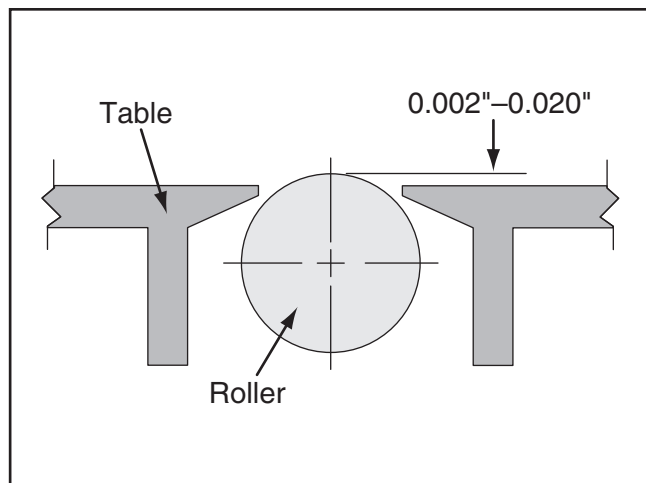


Figure 13. Bed roller height range.

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (see **Page 21**) to gauge the bed roller height from the table. If a Rotacator is not available, a straightedge and feeler gauges can be used, but extra care must be taken to achieve satisfactory results.

Note: *Misaligned bed rollers can cause workpiece chatter, a washboard surface, uneven workpiece feeding, or binding.*

To adjust the bed rollers:

1. Lower the table to give yourself at least 4" of working room below the cutterhead.
2. Loosen the locking set screws (**Figure 14**) above the roller adjusters (4 total).

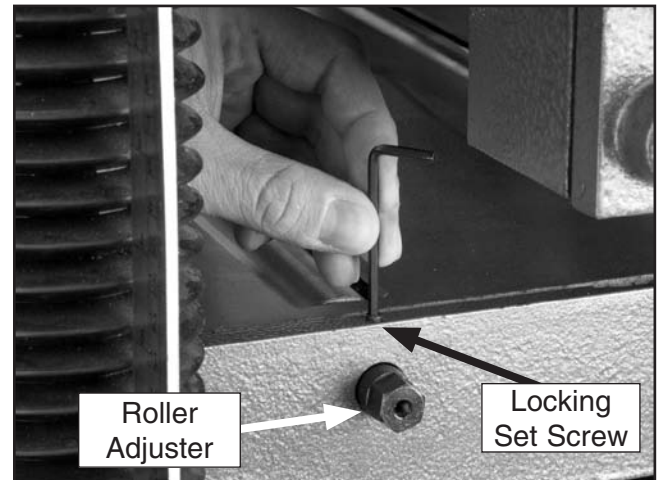


Figure 14. Bed roller controls (only one side shown).

3. Raise or lower the rollers by rotating the adjusters to reach your desired height.
4. Verify both sides of the bed roller are at the same height and lock them in position with the locking set screws.
5. Double check the roller heights to make sure they did not move when you locked them (if they did, repeat the procedure).



SECTION 5: ACCESSORIES

G1738—Rotacator™ Precision Planer Tool

The Rotacator is a dial indicator on a magnetic base and is designed for quickly and accurately setting the critical tolerances needed when adjusting any planer, so that nasty surprises such as non-parallel and chattered cuts can be eliminated. Helps adjust infeed/outfeed rollers, pressure bars, chip breakers, and bed rollers. Also a great setup tool for other machines! Accurate to 0.001". Indicator rotates 360°.



Figure 15. Rotacator™ Precision Planer Tool.

- G5562—SLIPIT® 1 Qt. Gel
- G5563—SLIPIT® 12 oz Spray
- G2871—Boeshield® T-9 12 oz Spray
- G2870—Boeshield® T-9 4 oz Spray
- H3788—G96® Gun Treatment 12 oz Spray
- H3789—G96® Gun Treatment 4.5 oz Spray



Figure 16. Recommended products for protecting unpainted cast iron/steel parts on machinery.

H9816—Power Twist® V-Belt - 3/8" x 60"

Smooth running with less vibration and noise than solid belts. The Power Twist® V-belts can be customized in minutes to any size—just add or remove sections to fit your needs. Requires 3 Power Twist® V-belts to replace the stock V-belts on your Model G1033X.

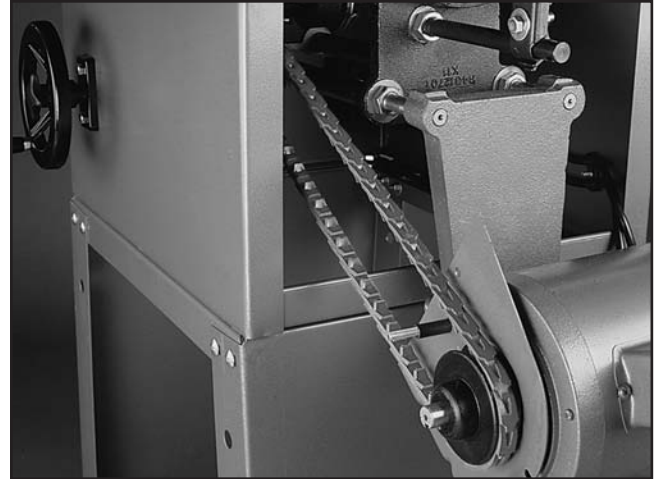


Figure 17. H9816 Power Twist® V-Belt.

G7315Z—Heavy-Duty SHOP FOX® Mobile Base

Make your machine mobile with this popular patented mobile base. The unique outrigger type supports increase stability and lower machine height. This super heavy duty mobile base is rated for up to a 1200 lb. capacity.

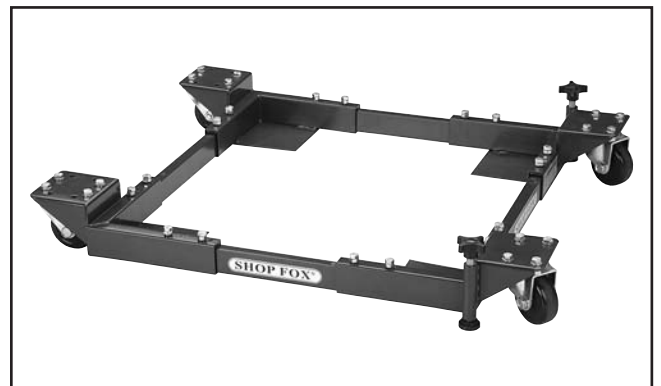


Figure 18. G7315Z SHOP FOX® Mobile Base.



Basic Eye Protection

T20501—Face Shield Crown Protector 4"

T20502—Face Shield Crown Protector 7"

T20503—Face Shield Window

T20452—"Kirova" Anti-Reflective S. Glasses

T20451—"Kirova" Clear Safety Glasses

H0736—Shop Fox® Safety Glasses

H7194—Bifocal Safety Glasses 1.5

H7195—Bifocal Safety Glasses 2.0

H7196—Bifocal Safety Glasses 2.5



Figure 19. Assortment of basic eye protection.

Basic Hearing Protection

H4978—Deluxe Earmuffs - 27dB

H4979—Twin Cup Hearing Protector - 29dB

T20446—Ear Plugs 200 Pair - 31dB

A must have if you or employees operate for hours at a time.



Figure 20. Hearing protection assortment.

H9893—Replacement Inserts (10 Pack)

These indexable carbide inserts can be rotated to provide four factory sharp edges before replacement.

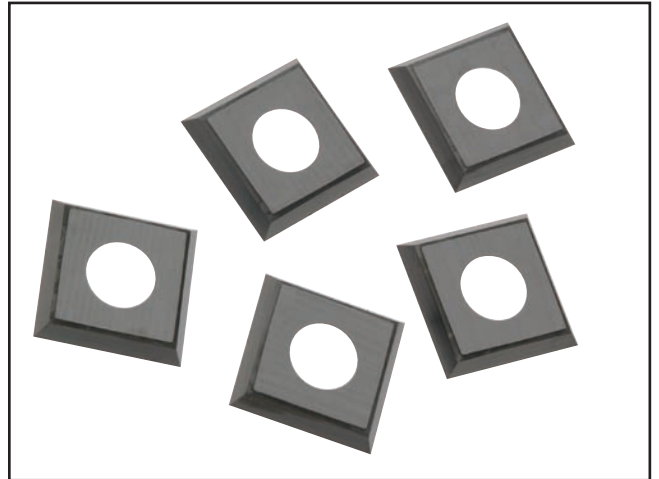


Figure 21. H9893 Carbide Inserts.

G9256—6" Dial Caliper

G9257—8" Dial Caliper

G9258—12" Dial Caliper

Essential for planing, jointing, or sanding to critical tolerances. These traditional dial calipers are accurate to 0.001" and can measure outside surfaces, inside surfaces, and heights/depths. Features stainless steel, shock resistant construction and a dust proof display. An absolute treat for the perfectionist!

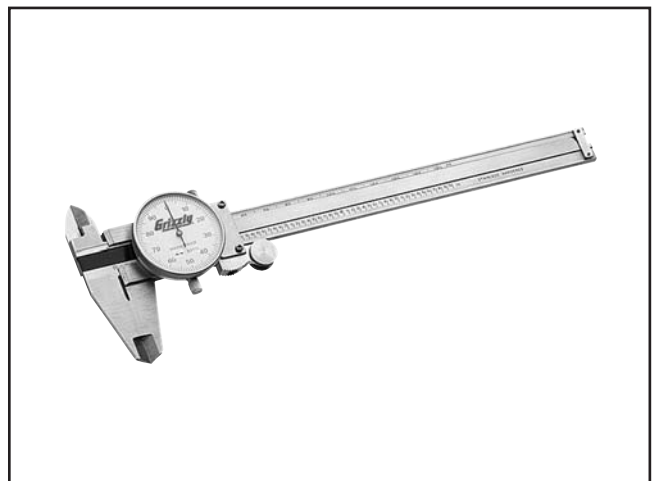


Figure 22. Grizzly® Dial Calipers.

Call 1-800-523-4777 To Order



SECTION 6: MAINTENANCE



Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

Daily:

- Clean unpainted cast iron part of table
- Lubricate feed rollers

Weekly Maintenance:

- Clean cutterhead
- Lubricate four columns

Monthly Check:

- Inspect V-belt tension, damage, or wear
- Clean/vacuum dust buildup from inside cabinet and off motor
- Lubricate worm gear
- Lubricate chain
- Lubricate drive chain

Yearly:

- Change gear box oil (should be performed after the first 20 hours when planer is new).

Cleaning

Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth—this ensures moisture from wood dust does not remain on bare metal surfaces. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning. We recommend products like SLIPIT®, G96® Gun Treatment, or Boeshield® T-9 (see **Page 21** for more details).

V-Belts

V-belt removal and replacement is simply a matter of loosening the V-belts, rolling them off of the pulleys, replacing them with new belts, then retensioning them.

Always replace V-belts with a matched set of 3 belts, or belt tension may not be even among the 3 belts and may cause premature belt failure.

Consider replacing stock belts with Power Twist V-belts (see **Page 21**) to reduce vibration and noise, and increase belt lifespan.

To adjust/replace belts the V-belts:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Open the motor access panel and V-belt cover.
3. Using a 19mm wrench, loosen the fasteners on the tension rods shown in **Figure 23**.

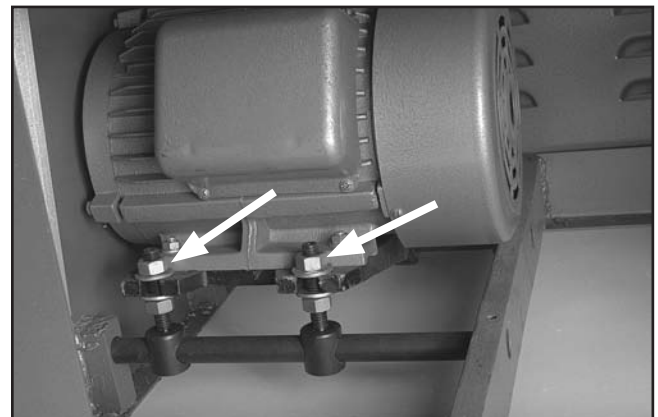


Figure 23. Fasteners needed to be loosened for V-belt replacement.

4. Lift the motor up and slide the V-belts off of the pulleys.
5. Slide the new belts onto the pulley, lower the motor, and tighten the fasteners loosened in **Step 3**.



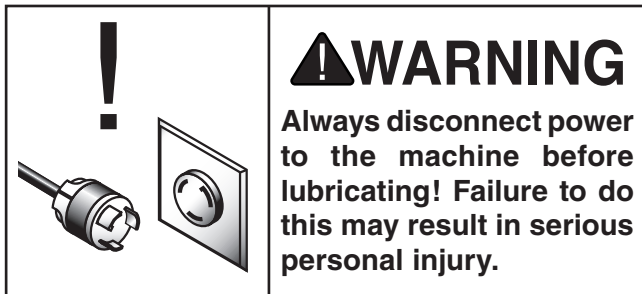
- Close the V-belt cover and motor access panel.

Note: The correct tension for the V-belts is 1/4" deflection when pushed in the center with moderate pressure. After the first 16 hours of belt life, retension them, as they will stretch and seat during this time.

Lubrication

The Model G1033X features factory-sealed bearings. A sealed bearing requires no lubrication during its lifetime. Should a bearing fail, your planer will probably develop a noticeable rumble/vibration, which will increase when the machine is put under load. Bearings are standard sizes and can be replaced through Grizzly.

Proper lubrication of other planer components are essential for long life and trouble-free operation. Below is a list of components that require periodic lubrication. Schedules are based on daily use. Adjust accordingly for your level of use.



Columns/Lead Screws: The four columns should be lubricated weekly with SAE 30W oil. Unfasten dust covers to gain access. The four lead screws should be lubricated with general purpose grease once a month.

Worm Gear: The worm gear should be inspected monthly and lubricated with general purpose grease when needed. Remove the worm gear box to inspect. See parts diagram for location.

Chain: The table height adjustment chain (see **Figure 27 on Page 28**) should be inspected monthly and lubricated with general purpose grease when needed.

Gear Box: Gear box oil should be changed after the first 20 hours of operation (see **Figure 24**).

Replace with 80W-90W gear oil. Inspect levels periodically and change yearly. Replace gear oil more frequently under heavy use. Fill until oil reaches the top of the filler plug port for correct oil level.

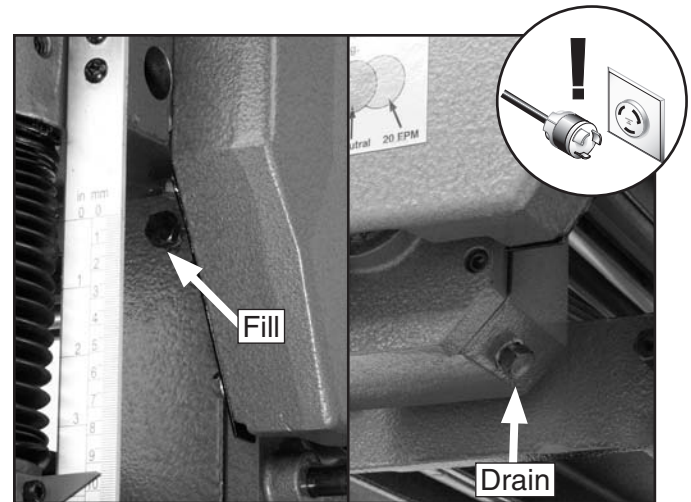


Figure 24. Gearbox oil drain/fill locations.

Drive Chain: The drive chain should be inspected and lubricated monthly. Check sprocket, chain and cotter pin during inspection. Use a general purpose grease. Some chains will have master links instead of cotter pins.

Feed Rollers: Regular lubrication of feed rollers is crucial to the operation of your planer. Lubricate every 30 hours of use. Each end of each power feed roller has an oiling port located on the top of the head casting (**Figure 25**). Apply SAE 30W oil, making sure that the lubricant penetrates the bearing.



Figure 25. Tension screw locations.



SECTION 7: SERVICE

Review the troubleshooting and procedures in this section to fix your machine if a problem develops. If you need replacement parts or you are unsure of your repair skills, then feel free to call our Technical Support at (570) 546-9663.

Troubleshooting

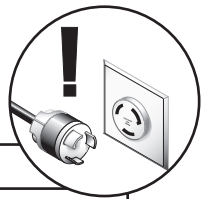


Motor & Machine Operation

Symptom	Possible Cause	Possible Solution
Motor will not start.	<ol style="list-style-type: none"> 1. Thermal overload relay inside magnetic switch has tripped. 2. Low voltage. 3. Open circuit in motor or loose connections. 4. Emergency stop button depressed. 	<ol style="list-style-type: none"> 1. Press the RESET button on the thermal overload relay; investigate reason it tripped to prevent future problems. 2. Check power line for proper voltage. 3. Inspect all lead connections on motor for loose or open connections. 4. Rotate clockwise until it pops out/replace.
Fuses or circuit breakers blow.	<ol style="list-style-type: none"> 1. Short circuit in line cord or plug. 	<ol style="list-style-type: none"> 1. Repair or replace cord or plug for damaged insulation and shorted wires.
Motor fails to develop full power (output of motor decreases rapidly with decrease in voltage at motor terminals).	<ol style="list-style-type: none"> 1. Power line overloaded with lights, appliances, and other motors. 2. Undersized wires or circuits too long. 3. Motor run capacitor at fault. 	<ol style="list-style-type: none"> 1. Reduce load on power line. 2. Increase wire sizes or reduce length of the circuit. 3. Replace run capacitor.
Motor overheats.	<ol style="list-style-type: none"> 1. Motor overloaded during operation. 2. Air circulation through the motor restricted. 	<ol style="list-style-type: none"> 1. Reduce cutting load; take lighter cuts. 2. Clean out motor to provide normal air circulation.
Motor stalls or shuts off during a cut.	<ol style="list-style-type: none"> 1. Motor overloaded during operation. 2. Thermal overload protection tripped in magnetic switch. 3. Short circuit in motor or loose connections. 4. Circuit breaker tripped. 	<ol style="list-style-type: none"> 1. Reduce cutting load; take lighter cuts. 2. Press the RESET button on the thermal overload relay, located inside the magnetic switch. 3. Repair or replace connections on motor for loose or shorted terminals or worn insulation. 4. Install correct circuit breaker; reduce # of machines running on that circuit.
Cutterhead slows or squeals when cutting, especially on start-up.	<ol style="list-style-type: none"> 1. V-belt loose. 2. V-belt worn out. 	<ol style="list-style-type: none"> 1. Tighten V-belt (Page 23). 2. Replace V-belt (Page 23).
Loud repetitious noise coming from machine.	<ol style="list-style-type: none"> 1. Pulley setscrews or keys are missing or loose. 2. Motor fan is hitting the cover. 3. V-belts are damaged. 	<ol style="list-style-type: none"> 1. Inspect keys and setscrews. Replace or tighten if necessary. 2. Adjust fan cover mounting position, tighten fan, or shim fan cover. 3. Replace V-belts (Page 23).
Vibration when running or cutting.	<ol style="list-style-type: none"> 1. Loose or damaged blade. 2. Damaged V-belt. 3. Worn cutterhead bearings. 	<ol style="list-style-type: none"> 1. Tighten or replace blade. 2. Replace. 3. Check/replace cutterhead bearings.



Cutting



Symptom	Possible Cause	Possible Solution
Excessive snipe (gouge in the end of the board that is uneven with the rest of the cut). Note: <i>A small amount of snipe is inevitable with all types of planers. The key is minimizing it as much as possible.</i>	<ol style="list-style-type: none"> One or both of the bed rollers are set too high. Outfeed extension slopes down or is not level with the main table. Chipbreaker or pressure bar set too low. Workpiece is not supported as it leaves the planer. 	<ol style="list-style-type: none"> Lower the bed rollers (Page 20). Shim the outfeed extension wing level with the main table. Raise the height of the chipbreaker or pressure bar (Page 30). Hold the workpiece up slightly as it leaves the outfeed end of the planer.
Workpiece stops/slows in the middle of the cut.	<ol style="list-style-type: none"> Taking too heavy of a cut. One or both of the bed rollers are set too low or too high. Chipbreaker or pressure bar set too low. Feed rollers set too low or too high. Table not parallel with head casting. Pitch and glue build up on planer components. 	<ol style="list-style-type: none"> Take a lighter cut. Lower/raise the bed rollers (Page 20). Raise the height of the chipbreaker or pressure bar (Page 30). Adjust the feed rollers to the correct height (Page 30) Adjust the table so it is parallel to the head casting. Clean the internal cutterhead components with a pitch/resin dissolving solvent.
Chipping (consistent pattern).	<ol style="list-style-type: none"> Knots or conflicting grain direction in wood. Nicked or chipped carbide cutter. Feeding workpiece too fast. Taking too deep of a cut. Misaligned chipbreaker. 	<ol style="list-style-type: none"> Inspect workpiece for knots and grain direction; only use clean stock. Rotate or replace the affected cutter (Page 27). Slow down the feed rate (Page 19). Take a smaller depth of cut. (Always reduce cutting depth when surface planing or working with hard woods.) Adjust both sides of the chipbreaker to the correct height (Page 30).
Fuzzy grain.	<ol style="list-style-type: none"> Wood may have high moisture content or surface wetness. Dull cutters. 	<ol style="list-style-type: none"> Check moisture content and allow to dry if moisture is too high. Rotate/replace the cutters (Page 27).
Long lines or ridges that run along the length of the board	<ol style="list-style-type: none"> Nicked or chipped cutter(s). 	<ol style="list-style-type: none"> Rotate/replace the cutters (Page 27).
Uneven knife marks, wavy surface, or chatter marks across the face of the board.	<ol style="list-style-type: none"> Feeding workpiece too fast. Chipbreaker or pressure bar set unevenly. Carbide cutters not installed evenly. Worn cutterhead bearings. 	<ol style="list-style-type: none"> Slow down the feed rate. Adjust the height of the chipbreaker or pressure bar (Page 30). Make sure carbide cutters do not have debris under them; make sure cutters are torqued down evenly. Replace cutterhead bearings.
Glossy surface.	<ol style="list-style-type: none"> Carbide cutters are dull. Feed rate too slow. Cutting depth too shallow. 	<ol style="list-style-type: none"> Rotate/replace the cutters (Page 27). Increase the feed rate (Page 19). Increase the depth of cut.
Chip Marks (inconsistent pattern).	<ol style="list-style-type: none"> Chips aren't being properly expelled from the cutterhead. 	<ol style="list-style-type: none"> Use a dust collection system; adjust the chip deflector in or out depending on your setup (Page 33).



Rotating/Changing Carbide Cutters

Tools Needed: Qty
T-Handle Wrench w/T-25 Torx Driver 1

The cutterhead is equipped with 96 indexable carbide cutters. Each cutter can be rotated to reveal any one of its four cutting edges. Therefore, if one cutting edge becomes dull or damaged, simply rotate it 90° to reveal a fresh cutting edge (**Figure 26**).

In addition, each cutter has a reference dot on one corner. As the cutter is rotated, the reference dot location can be used as an indicator of which edges are used and which are new. When the reference dot revolves back around to its starting position, the cutter should be replaced.

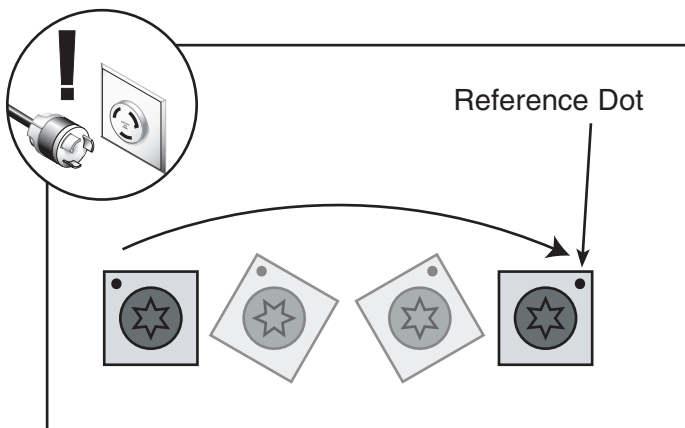


Figure 26. Cutter rotating sequence.

To rotate or change a carbide cutter:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove any sawdust from the head of the carbide cutter Torx screw.
3. Remove the Torx screw and carbide cutter.
4. Clean all dust and dirt off the cutter and the cutterhead pocket from which the cutter was removed, and replace the cutter so a fresh, sharp edge is facing outward.

Note: *Proper cleaning is critical to achieving a smooth finish. Dirt or dust trapped between the cutter and cutterhead will slightly raise the cutter, and make noticeable marks on your workpieces the next time you plane.*

5. Lubricate the Torx screw threads with a light machine oil, wipe the excess oil off the threads, and torque the Torx screw to 48-50 inch/pounds.

Note: *Excess oil may squeeze between the cutter and cutterhead, thereby lifting the cutter slightly and affecting workpiece finishes.*



Chain Tension

Tools Needed:	Qty
Phillips Screwdriver #2	1
Wrench or Socket 14mm	1

The chain drive transfers movement from the handwheel to elevate the table. The chain drive can be adjusted to remove slack if the chain stretches over time or is loosened during table leveling procedures.

To adjust the chain tension:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the motor access panel.

NOTICE

During the next step, **DO NOT** let the chain fall off the sprockets—returning it to its proper location without changing the table adjustments can be very difficult.

3. Loosen the two lock bolts and move the idler sprocket against the chain to tighten it (Figure 27).

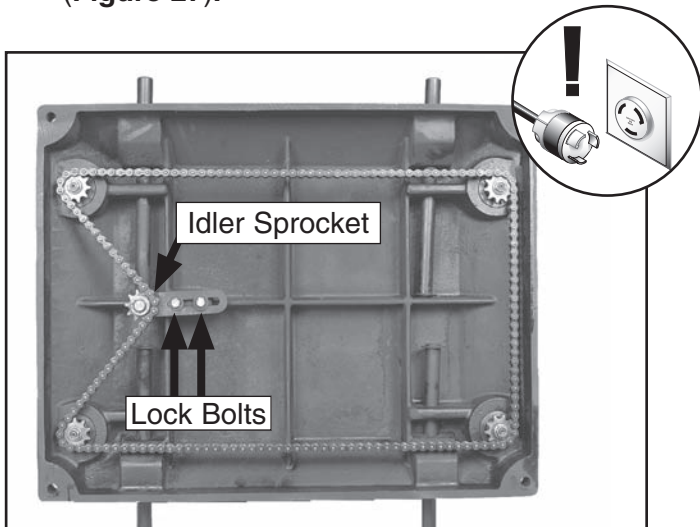


Figure 27. Underside of table.

4. Re-tighten the two locking bolts.
5. Check chain lubrication. Refer to **SECTION 6: MAINTENANCE** on **Page 23** for further details.

Table Parallelism

Maximum Allowable Tolerances:

Cutterhead/Table Side-to-Side.....	0.002"
Head Casting/Table Front/Back	0.020"

Tools Needed:	Qty
Rotacator	1
Phillips Screwdriver #2	1
Wrench or Socket 14mm	1
Hex Wrench 6mm.....	1

Table parallelism is critical to the operation of the machine. As such, it is essential that the table is parallel with the cutterhead (within 0.002") from side-to-side, as illustrated in **Figure 28**.

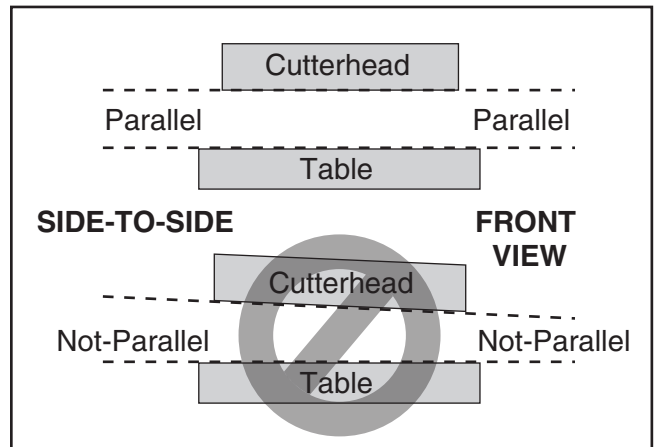


Figure 28. Side-to-side parallelism of table and cutterhead.



How the table sits in relation to the head casting from front-to-back is also important (see **Figure 29**). Because the feed rollers, pressure bar, and chip breaker will be adjusted off the table position, the tolerances on the front-to-back positioning are not as critical as the cutterhead/table side-to-side positioning. Therefore, the maximum allowable tolerance for the front-to-back parallelism is not more than 0.020".

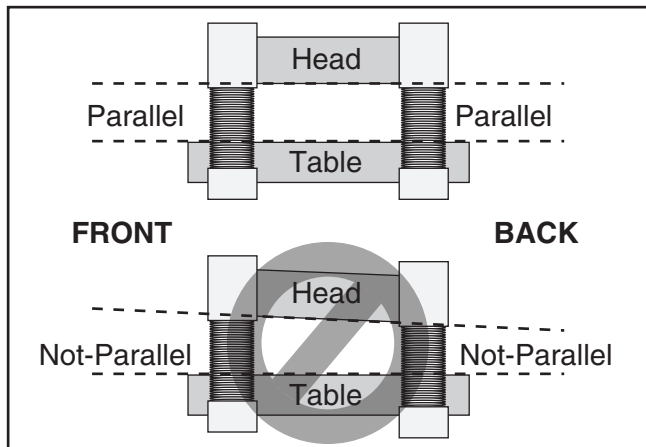


Figure 29. Front-to-back parallelism.

Table Parallelism Inspection

The easiest way to determine if your head casting has a parallelism problem is to plane a workpiece and measure the thickness in multiple locations. If the workpiece is tapered from left-to-right or from front-to-back, then parallelism may be a problem.

Use your Rotacator to further inspect the table parallelism. If you do not have a Rotacator, a wood block and feeler gauges may be used, but extra care must be taken to ensure accuracy. If the table is not within the maximum allowable tolerances, it must be adjusted.

Table Parallelism Adjustments

The table is adjusted by turning the chain sprockets underneath the table for movements over 0.016" or by adjusting how the table is mounted on the columns for movements under 0.016".

NOTICE

When making adjustments, tighten fasteners after each step to ensure the accuracy of your tests. When adjusting the chain sprockets, keep in mind that if the chain becomes too loose, it will fall off of all the sprockets. Returning it to its proper location can be frustrating.

To adjust the table parallelism:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the motor access panel and locate the chain on the underside of the table.
3. Loosen the lock bolts and idler sprocket (see **Chain Tension** instructions on **Page 28**).
4. Mark the location of one tooth in the sprocket that you are adjusting.
5. Move the chain away from only the sprocket you want to adjust so only that sprocket can be turned independent of the chain.

Note: *If the left side of the table is too high, the left two sprockets will need to be adjusted. Each tooth on the sprocket represents 0.016" of vertical movement as the cogs are turned. Make sure, as you turn the sprockets, to keep an accurate tooth count to ensure that the table is adjusted equally.*
6. Carefully turn the sprocket (clockwise to raise the table; counterclockwise to lower the table) just enough to position the next tooth at the marked location, then fit the chain around sprocket again.



7. Repeat **Steps 4–6** with each sprocket that needs to be adjusted until the table-to-cutterhead clearance is within 0.016" from one side to the other.
8. Make sure the chain is properly fitted on the sprockets, and tighten the idler sprocket and lock bolts.
9. Micro-adjust the table position by loosening the cap screws shown in **Figure 30** and lifting the table upward or downward until the table and cutterhead are in alignment.

Note: *This process may require adjusting the columns on both the left and right hand sides until you find the correct combination.*

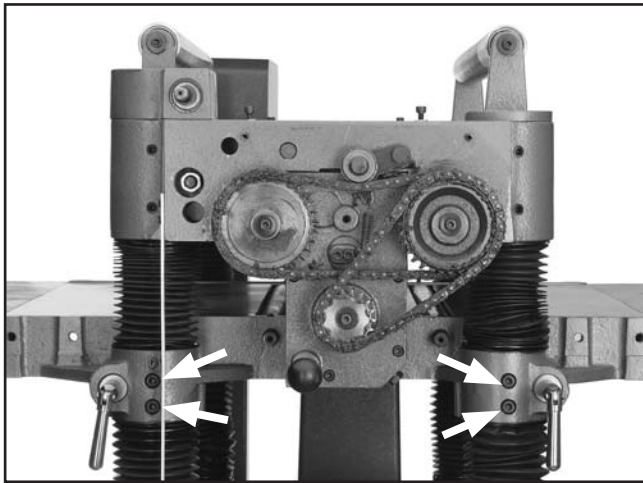


Figure 30. Table micro-adjustment screws.

Internal Component Heights

Distance Below Cutter Edge at *BDC

Infeed Roller	0.040"
Chip Breaker.....	0.040"
Pressure Bar.....	0.040"
Outfeed Roller	0.040"

Tools Needed:

Qty

Hex Wrench 3mm.....	1
Hex Wrench 5mm.....	1
Wrench or Socket 10mm.....	1
Rotacator (optional, Page 21)	1

*BDC = Bottom Dead Center (see **Figure 31**).

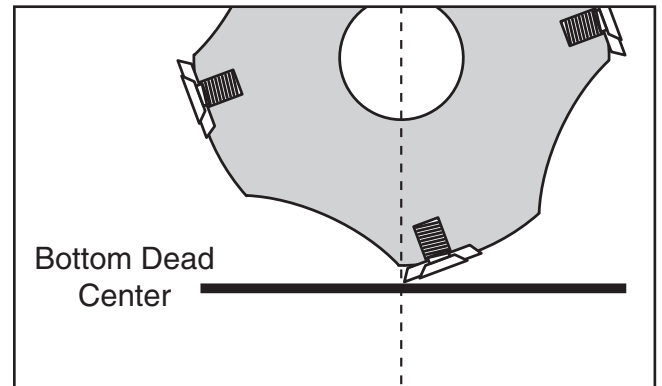


Figure 31. Carbide insert at bottom dead center

To ensure accurate results and make the adjustment process quicker and easier, we recommend using a Rotacator (see **Page 21**) for these adjustments.

If a Rotacator is not available, a 6' 2x4 cut into two even sized pieces and a 0.40" feeler gauge can be used, but care must be taken when jointing the blocks to achieve accurate results.

To set the height of the infeed and outfeed rollers, chip breaker, and pressure bar using a Rotacator:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!



2. Make sure the cutters are set correctly.
3. Lower the table at least 4" below the head casting and lock the table in place.
4. Remove the dust port, top cover, and belt cover.
5. Using your Rotacator, find BDC of any carbide insert edge by slowly rocking the cutterhead pulley back and forth, and set the Rotacator dial to zero, as shown in **Figure 32**.

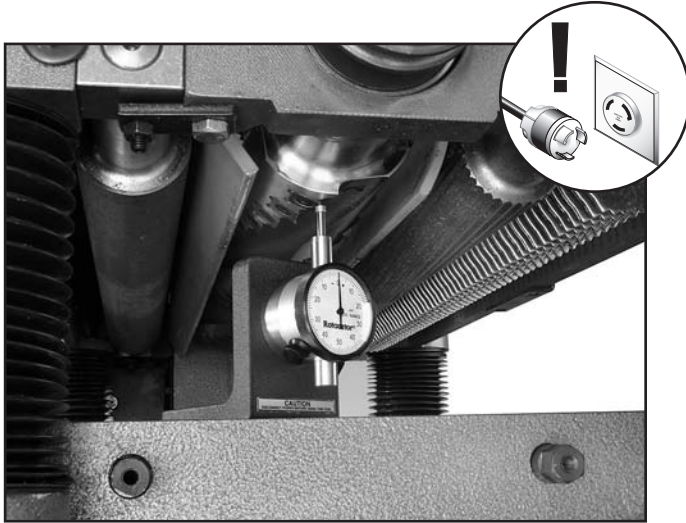


Figure 32. Finding BDC with the Rotacator.

6. Place the Rotacator under the right-hand side of the infeed roller and find bottom dead center on a serrated edge by sliding the Rotacator right to left in a zigzag pattern—toward the infeed extension wing, then toward the outfeed extension wing, and so on.
7. Adjust the height of the infeed roller on the same side as the Rotacator to the specification given at the beginning of this procedure, using the zero setting of the Rotacator as a reference point. **Figure 33** shows the jam nut and set screw for adjusting the roller height.
8. Repeat **Steps 6–7** on the left-hand side of the infeed roller.
9. Double-check and micro-adjust both sides of the infeed roller, then carefully lock both sides in place.

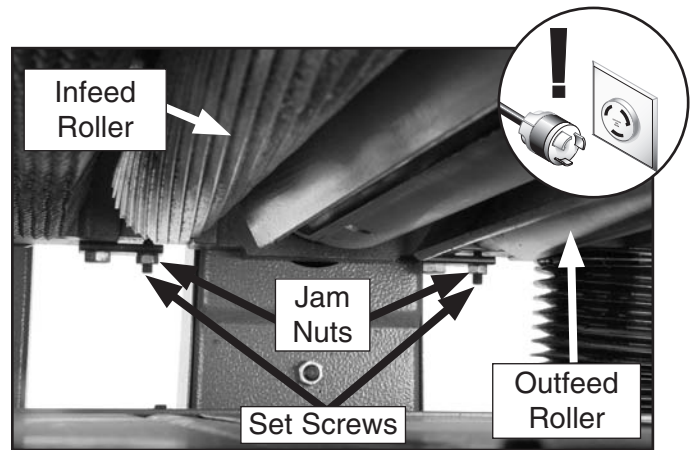


Figure 33. Infeed and outfeed height adjustment controls (one side shown).

10. Using the same zeroed reference on the Rotacator, adjust the height of the chip breaker, pressure bar, and outfeed roller (**Figure 33**) to their given specifications. The adjustment controls for each are shown in **Figures 34 & 35**.

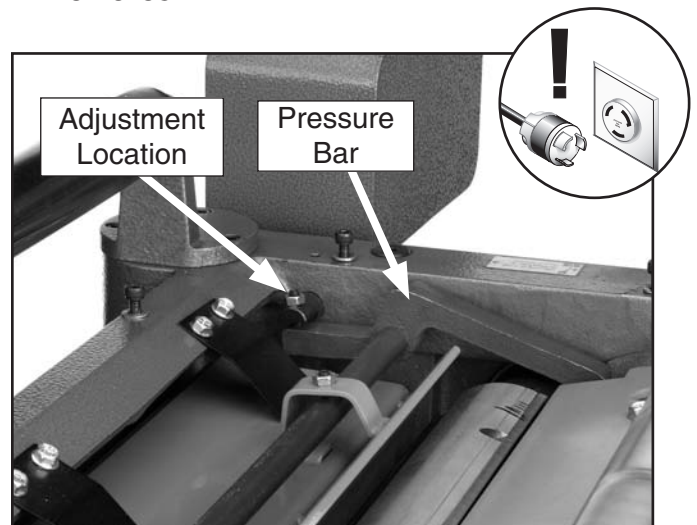


Figure 34. Adjusting pressure bar height.

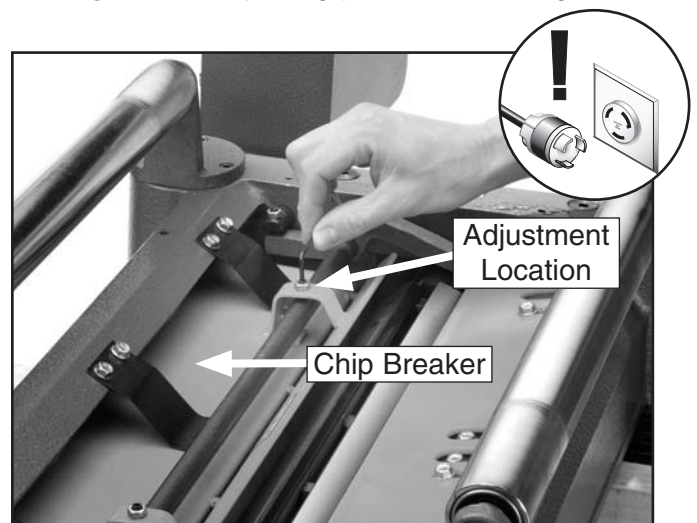


Figure 35. Adjusting chip breaker height.



To adjust the height of the infeed and outfeed rollers, chip breaker and pressure bar using wood blocks and a feeler gauge:

1. Build the wood blocks by cutting a STRAIGHT 6' long 2x4 in half.

Note: Having the wood blocks at an even height is critical to the accuracy of your over-all adjustments. For best results, remove board warpage by squaring the 2x4 with a jointer and table saw before cutting in half.

2. DISCONNECT THE PLANER FROM THE POWER SOURCE!
3. Lower the bed rollers below the table.
4. Place one wood block along the left side of the table, and place the other wood block along the right side of the table, as illustrated in **Figure 36**.

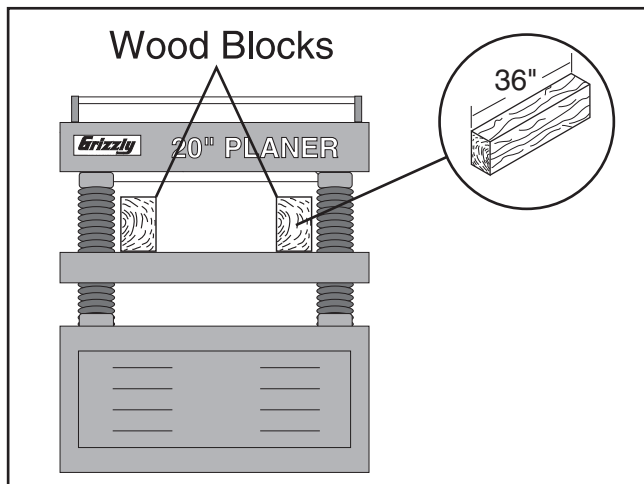


Figure 36. Wood blocks on table.

5. Remove the dust port, top cover, and belt cover.
6. Adjust the table and use the feeler gauge until you have a 0.040" gap between the edge of a carbide insert at bottom dead center (find by rocking cutterhead pulley) and the wood blocks.
7. Lock the table height in place, as the wood blocks will now be your reference points for the rest of the adjustments.
8. Loosen the infeed roller adjustment jam nuts (**Figure 33**) and turn the adjustment set screws on each end to raise the feed roller above the wood block (if necessary), then bring it back down so it just touches the wood block on both sides.
9. Lock the infeed roller adjustment set screws in place with the jam nuts, making sure they do not move while tightening.
10. Without moving the table, adjust the chip breaker (**Figure 35**), pressure bar (**Figure 34**), and outfeed roller (**Figure 33**) in the same manner, using the wood blocks as your reference point.
11. When you are finished with the adjustments, replace the top cover, dust port, and belt cover.



Spring Tension

Tools Needed:	Qty
Hex Wrench 6mm.....	1

Roller spring tension must be adjusted so that feed roller pressure is uniform. Roller spring tension will vary, depending on the type of wood you plane. This is usually determined from trial-and-error.

Generally speaking, less spring tension is more forgiving on workpieces. Therefore, if you primarily plane milled lumber with relatively consistent surfaces, you can get away with having less spring tension. Likewise, if you primarily plane rough lumber with inconsistent surface heights, more spring tension is a must to keep the workpiece feeding through the planer without stopping.

If workpieces regularly stop feeding during operation, it may be a sign of weak spring tension.

To adjust feed roller spring tension:

1. Locate the four adjustment screws located on the top of the planer, as shown in **Figure 37**.
2. Adjust tension screws #1–#3 so that they protrude $\frac{1}{8}$ " above the head casting.
3. Adjust tension screw #4 so that it protrudes $\frac{5}{16}$ " above the head casting.

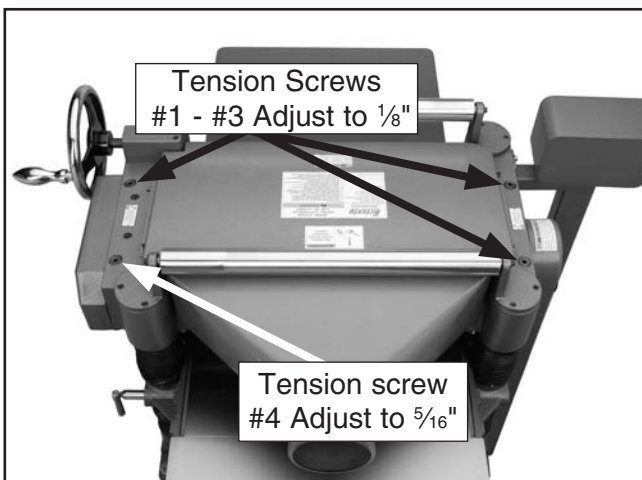


Figure 37. Tension screw locations and adjustments.

Chip Deflector Positioning

Chip Deflector Gap Setting

If Planer Used w/Dust Collector	$\frac{1}{4}$ "
If Planer Used w/o Dust Collector	$\frac{1}{16}$ "

Tools Needed:	Qty
Wrench or Socket 10mm.....	1
Hex Wrench 5mm.....	1

The chip deflector keeps chips from falling onto the outfeed roller.

To adjust the deflector position:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the dust port and top cover.
3. Loosen the chip deflector mounting bolts (see **Figure 38**).

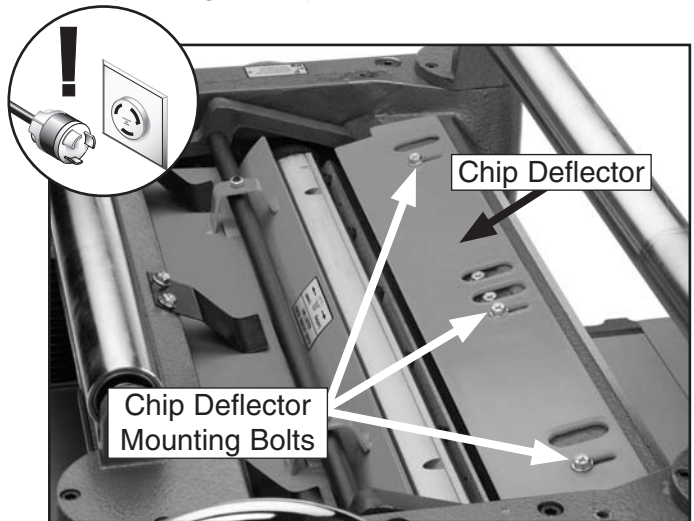


Figure 38. Chip deflector and mounting bolts.

4. Make sure the deflector is beveled toward the cutterhead. Move the deflector until the edge is the correct distance (given above) from the closest carbide insert. Use the cutterhead pulley to rotate the cutterhead to ensure clearance.
5. Re-tighten the mounting bolts and return the top cover to the planer.



Scale Calibration

Tools Needed:	Qty
Phillips Head Screwdriver #2	1
Calipers	1

The scale can be adjusted for accuracy. The machine will need to be run to make proper adjustments.

To calibrate the scale:

1. Set the table to the approximate thickness of your test lumber. Measure the lumber with calipers to determine its exact thickness.
2. Move the table to $\frac{1}{16}$ " under the thickness of your lumber and feed your test board through the planer.
3. Turn the handwheel one full rotation and run the board through once more. Turn the board over and repeat.
4. Re-measure the board and compare your results with the scale. If there is a discrepancy, loosen the screws (see **Figure 39**) and adjust as necessary.

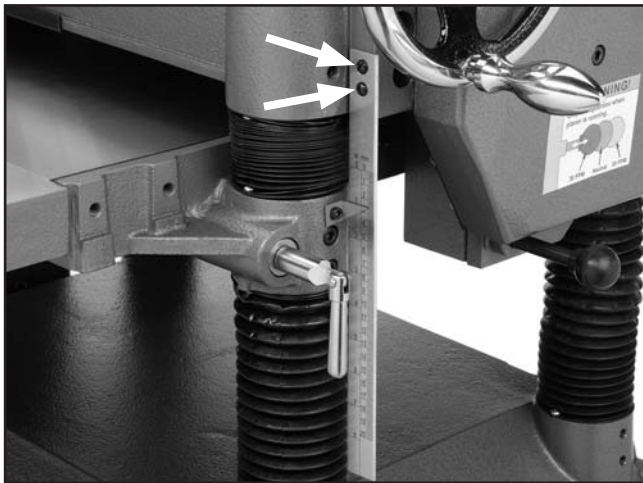


Figure 39. Depth scale adjustment screws.

Anti-Kickback Fingers

The Model G1033X provides an anti-kickback system as a safety feature. The anti-kickback fingers hang from a rod suspended across the cutterhead casting. The anti-kickback fingers should be inspected regularly.

Check the fingers (**Figure 40**) to ensure that they swing freely and easily. If the fingers do not swing freely and easily, clean them with a wood resin solvent.

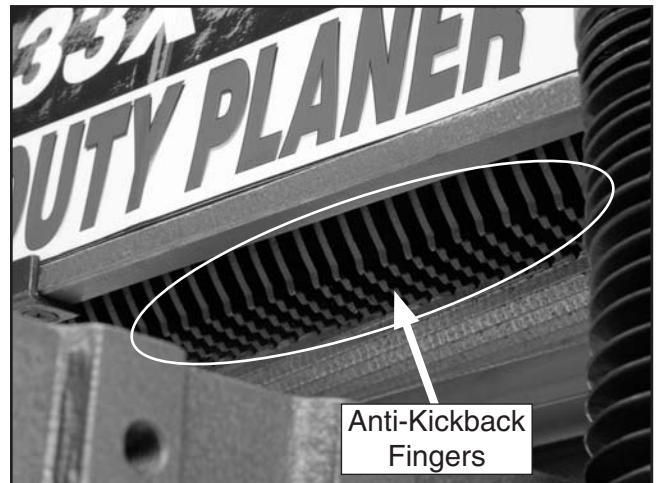


Figure 40. Anti-kickback fingers.

!WARNING

Proper operation of the anti-kickback fingers is essential for the safe operation of this machine. Failure to ensure that they are working properly could result in serious operator injury.

Do not apply oil or other lubricants to the anti-kickback fingers. Oil or grease will attract dust, restricting the free movement of the fingers.



Pulley Alignment

Tools Needed:	Qty
Straightedge	1
Wrench 14mm	2
Phillips Screwdriver #2	1

Proper pulley alignment (see **Figure 41**) prevents premature belt wear. The pulleys are properly aligned when they are parallel and in the same plane as each other. Use a straightedge on the edge of the pulleys to judge alignment.

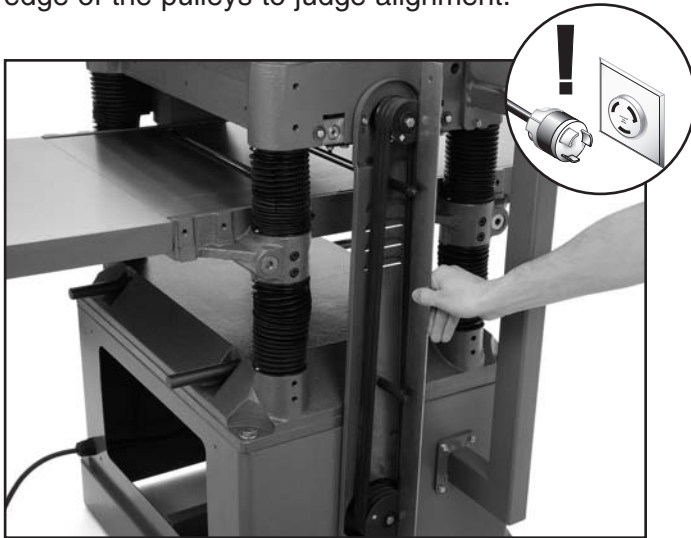


Figure 41. Checking belt alignment.

Should you find that the pulleys are out of alignment:

1. DISCONNECT THE PLANER FROM THE POWER SOURCE!
2. Remove the motor access panel, the V-belt cover, and loosen the belt tension (**Page 23**).

3. Loosen the fasteners that hold the motor to the brackets shown in **Figure 42** just enough to allow the motor to be repositioned.

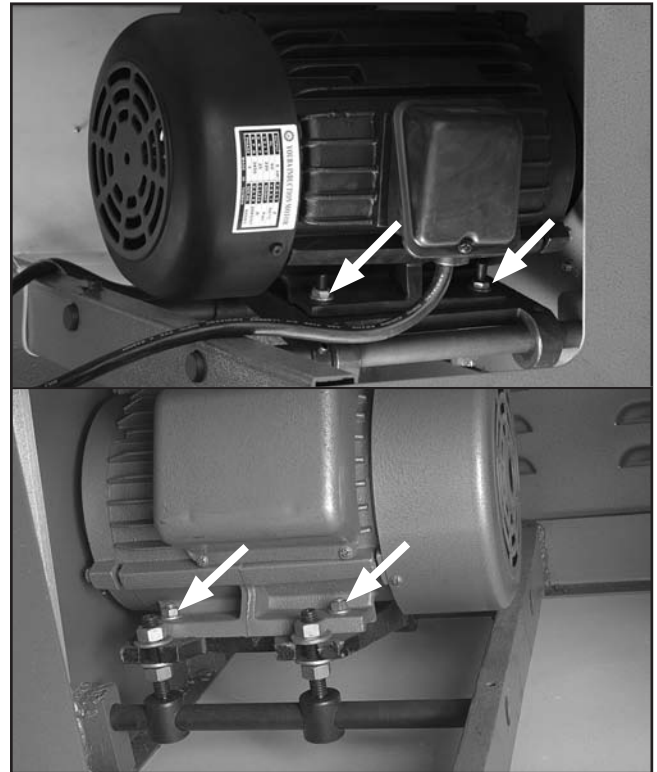
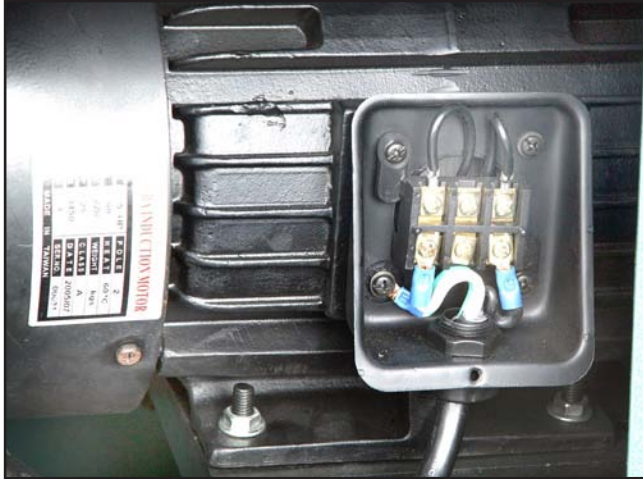


Figure 42. Motor mounting fasteners for adjusting pulley alignment.

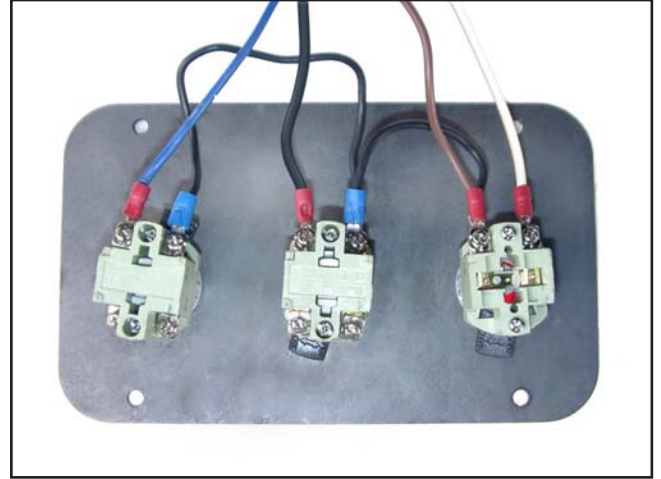
4. Slide the motor as required to align the pulleys.
5. Re-tighten the motor mount fasteners carefully to assure that the tightening process does not move the motor.
6. Re-tension the V-belts.
7. Replace the belt cover and motor access panel.



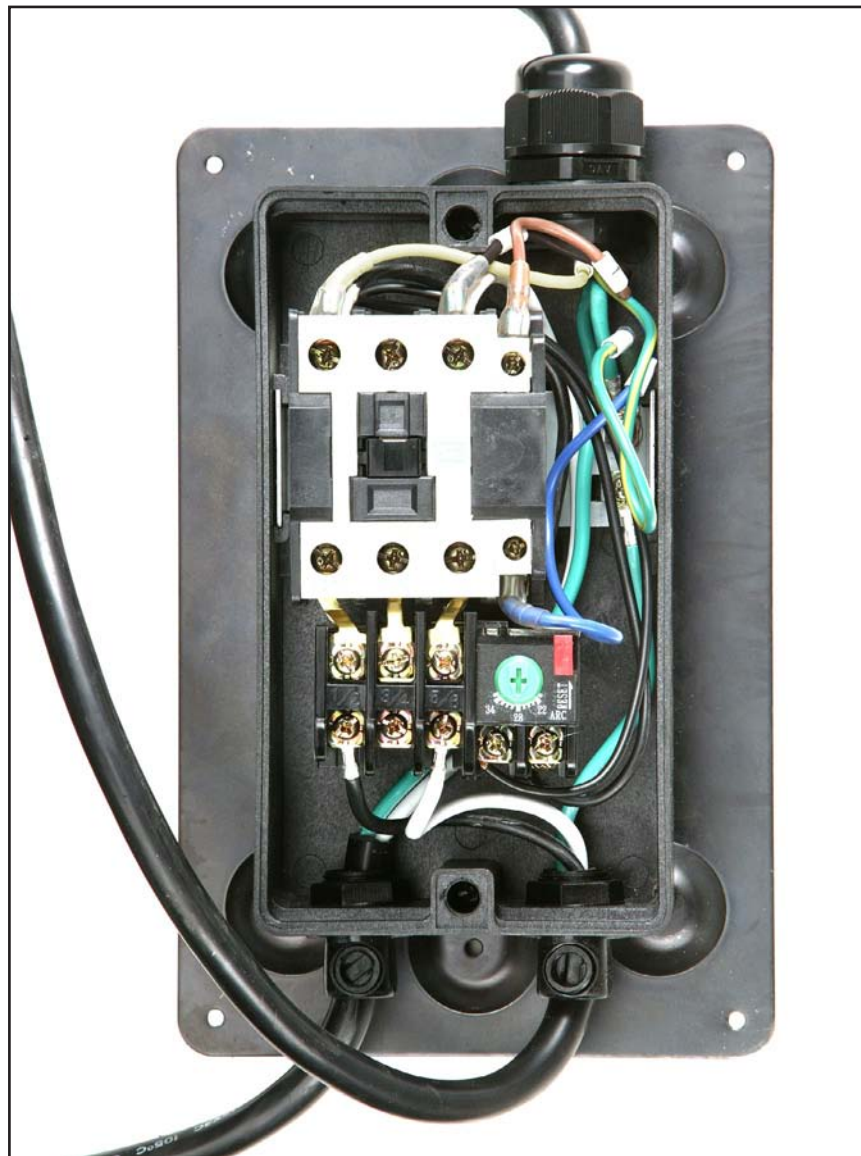
Electrical Components



Motor Junction Box



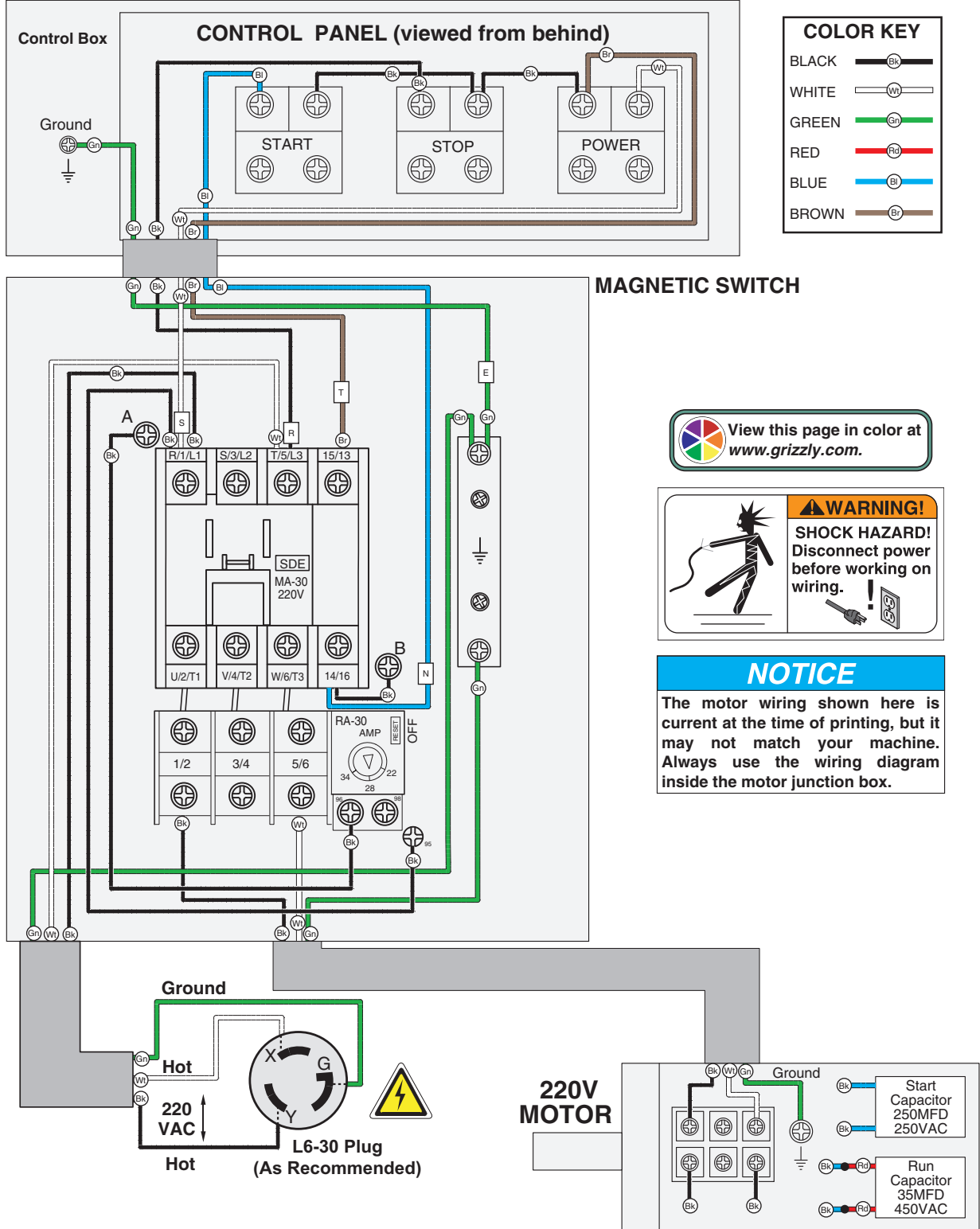
Control Panel



Magnetic Switch



Wiring Diagram



COLOR KEY

BLACK	
WHITE	
GREEN	
RED	
BLUE	
BROWN	

View this page in color at www.grizzly.com.

WARNING!
SHOCK HAZARD!
Disconnect power before working on wiring.

NOTICE
The motor wiring shown here is current at the time of printing, but it may not match your machine. Always use the wiring diagram inside the motor junction box.



Headstock Parts List

REF	PART #	DESCRIPTION
1	P1033X001	ROUND KNOB 5/16-18
2	P1033X002	V-BELT COVER
3	PVM59	V-BELT M59 3L590
4	P1033X004	STUD
5	PB09M	HEX BOLT M8-1.25 X 20
6	PWF08M	FENDER WASHER 8MM
7	PFS02M	FLANGE SCREW M6-1 X 12
8	P1033X008	PULLEY GUARD
9	PN02	HEX NUT 5/16-18
10	P1033X010	CUTTERHEAD PULLEY
11	P1033X011	DUST HOOD ASSEMBLY
12	PB02M	HEX BOLT M6-1 X 12
13	PW03M	FLAT WASHER 6MM
14	PSB26M	CAP SCREW M6-1 X 12
15	P1033X015	UPPER COVER
16	PW03M	FLAT WASHER 6MM
17	PSB01M	CAP SCREW M6-1 X 16
18	P1033X018	HANDWHEEL ASSEMBLY
18-1	P1033X018-1	HANDWHEEL
18-2	P1033X018-2	HANDLE M12-1.75
20	P1033X020	GASKET
21	P1033X021	CHIP DEFLECTOR
22	P1033X022	SPRING PLATE
23	PSS11M	SET SCREW M6-1 X 16
24	P1033X024	SPRING PLATE
25	P1033X025	OILER SCREW M22-1.5
26	PW01M	FLAT WASHER 8MM
27	P1033X027	BRACKET
28	P1033X028	SHAFT M22-.5 X 20
29	P1033X029	IDLER PULLEY
30	P1033X030	SHAFT 19.05 X 21
31	P1033X031	RIGHT BACKING PLATE
32	PRP07M	ROLL PIN 6 X 20
33	P1033X033	CHAIN DRIVE COVER
34	PSB12M	CAP SCREW M8-1.25 X 40

REF	PART #	DESCRIPTION
35	P1033X035	EXTENSION SPRING 8.5 X 14
36	P1033X036	HANGER
38	P1033X038	LEFT BACKING PLATE
40	PSS13M	SET SCREW M10-1.5 X 12
41	PSS14M	SET SCREW M8-1.25 X 12
42	P1033X042	HEAD CASTING
43	P1033X043	SHAFT 15.875 X 60
44	PN01M	HEX NUT M6-1
45	PSS25M	SET SCREW M6-1 X 20
46	PFH30M	FLAT HD SCR M5-.8 X 8
47	P1033X047	DEPTH LIMITER
48	PB09M	HEX BOLT M8-1.25 X 20
49	P1033X049	SCALE ASSEMBLY
49-1	PS14M	PHLP HD SCR M6-1 X 12
49-2	P1033X049-2	INDICATOR
49-3	P1033X049-3	SCALE
49-4	PSB50M	CAP SCREW M5-.8 X 10
50	P6206ZZ	BALL BEARING 6206ZZ
51	PK09M	KEY 8 X 8 X 36
52A	P1033X052A	SPIRAL CUTTERHEAD ASSY V2.07.07
52A-1	H9893	INSERTS 15 X 15 X 2.5-10 PK
52A-2	PFH32	FLAT HEAD TORX 10-32 X 1/2
52A-3	P1033X052A-3	SPIRAL CUTTERHEAD BODY V2.07.07
53	P1033X053	COMPRESSION SPRING 19.7 X 12
54	P1033X054	BUSHING BLOCK
55	P1033X055	PLATE
56	PLW04M	LOCK WASHER 8MM
57	P1033X057	PRESSURE BAR
58	P1033X058	OUTFEED ROLLER
59	PK01M	KEY 5 X 5 X 22
60	P1033X060	SPROCKET
61	PW03M	FLAT WASHER 6MM
62	PB83M	HEX BOLT M6-1 X 16
63	P1033X063	BRACKET



REF	PART #	DESCRIPTION
64	P1033X064	SHAFT 15.875 X 710
65	P1033X065	CHIP BREAKER
66	P1033X066	SPROCKET
67	PR03M	EXT RETAINING RING 12MM
68	PEC05M	E-CLIP 15MM
69	P1033X069	SPACER
70	P1033X070	ANTI-KICKBACK FINGER
71	P1033X071	LOCK ROD
72	P1033X072	SHAFT 19.95 X 680
73	PN09M	HEX NUT M12-1.75
74	P1033X074	INFEED ROLLER
75	P1033X075	CHAIN
76	PSB05M	CAP SCREW M8-1.25 X 50
77	P6204ZZ	BALL BEARING 6204ZZ
78	P1033X078	GEAR 16T
79	PSB06M	CAP SCREW M6-1 X 25
80	P6201	BALL BEARING 6201ZZ
81	P1033X081	GEAR 47T
82	P1033X082	GEAR 18T AND SHAFT
83	PK10M	KEY 5 X 5 X 12
84	P1033X084	GEAR CASE COVER
85	P1033X085	PIN 8 X 20
86	P1033X086	GEAR 18T/22T 2-SPEED
87	PK11M	KEY 6 X 6 X 40
88	PK06M	KEY 5 X 5 X 10
89	P1033X089	GEAR 71T
90	P1033X090	BALL KNOB 3/8-16
91	P1033X091	SPROCKET & CHAIN ASSY
91-1	P1033X091-1	CHAIN
91-2	P1033X091-2	SPROCKET
91-3	P1033X091-3	OUTER CHAIN TENSIONER
91-4	P1033X091-4	SHAFT 19.05 X 21
91-5	P1033X091-5	BRACKET
91-6	PSB48M	CAP SCREW M6-1 x 35

REF	PART #	DESCRIPTION
91-7	PW03M	FLAT WASHER 6MM
93	P1033X093	OIL PLUG
94	P1033X094	OIL SEAL 28 X 40 X 8
95	P1033X095	GEAR BOX
95A	P1033X095A	GEAR BOX ASSY
96	P1033X096	GASKET
97	P1033X097	DOUBLE GEAR 96T/92T
98	PFS14M	FLANGE SCREW M6-1 X 16
99	P1033X099	SHAFT 20 X 106
100	P4002429	COMPRESSION SPRING 5.9 X 9
101	PSTB003M	STEEL BALL 6MM
102	P1033X102	OIL SEAL 25 X 47 X 6
103	P6204ZZ	BALL BEARING 6204ZZ
104	P1033X104	SHIFTER
105	P1033X105	SHIFTING SHAFT
106	POR0012	O-RING 12 X 2.4
116	PSS04M	SET SCREW M6-1 X 12
117	P6201ZZ	BALL BEARING 6201ZZ
133	PW06M	FLAT WASHER 12MM
159	PK05M	KEY 4 X 4 X 10
171	P1033X171	ROLLER STAND
172	P1033X172	ROLLER
173	P1033X173	ROLLER SHAFT
174	P1033X174	WORM GEAR BOX
175	PSB37M	CAP SCREW M6-1 X 50
176	P1033X176	WORM
177	PR29M	INT RETAINING RING 32MM
178	P1033X178	COLLAR
179	PW03M	FLAT WASHER 6MM
180	PSB04M	CAP SCREW M6-1 X 10
200	PSB04M	CAP SCREW M6-1 X 10
201	P6202ZZ	BALL BEARING 6202ZZ
233A	P1033X233A	WRENCH T-HANDLE T-25 V2.07.07
234A	P1033X234A	TORX BIT T-25 V2.07.07



Table Parts Breakdown

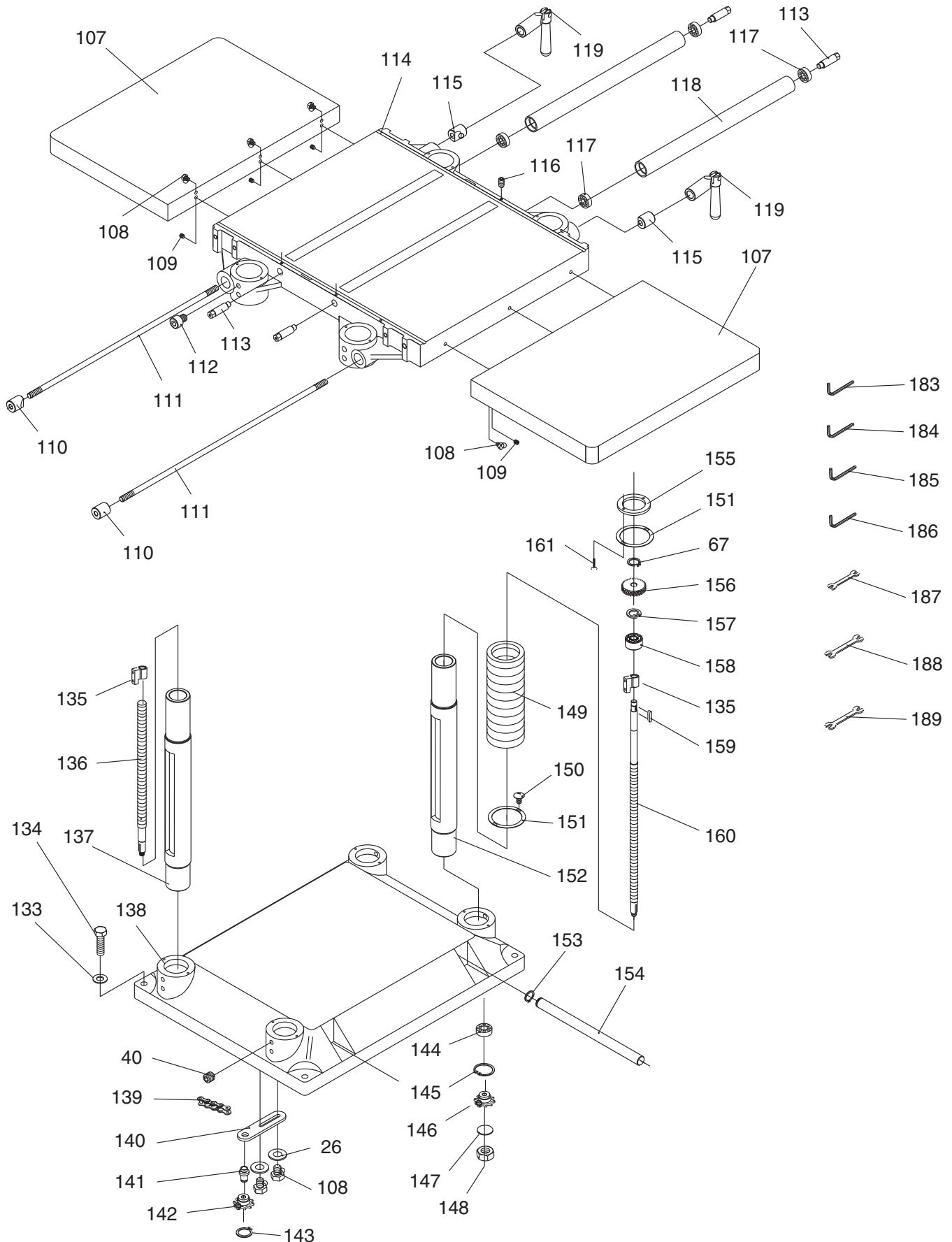


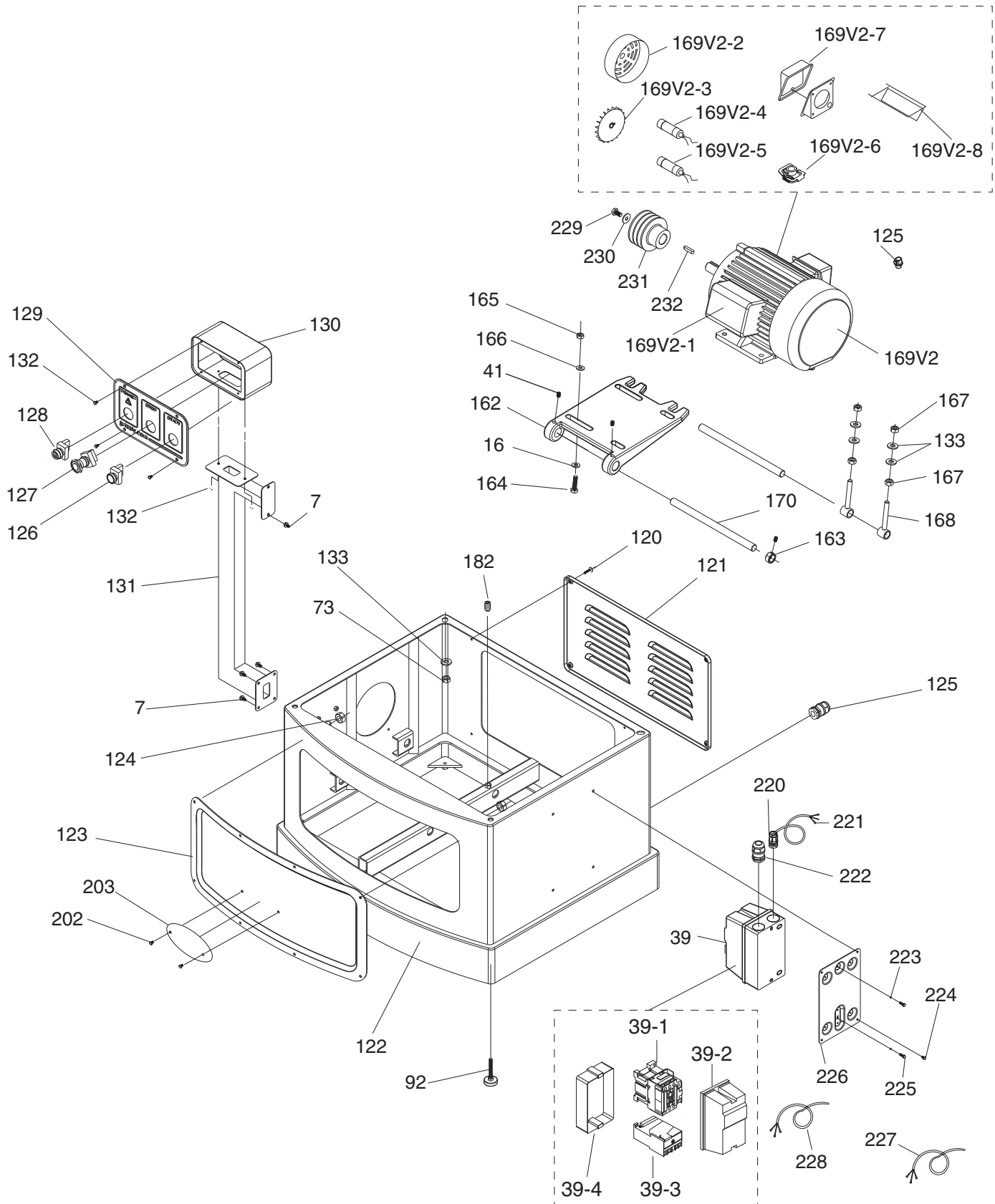
Table Parts List

REF	PART #	DESCRIPTION
26	PW01M	FLAT WASHER 8MM
40	PSS13M	SET SCREW M10-1.5 X 12
67	PR03M	EXT RETAINING RING 12MM
107	P1033X107	EXTENSION WING
108	PB07M	HEX BOLT M8-1.25 X 25
109	PSS09M	SET SCREW M8-1.25 X 20
110	P1033X110	THREADED GIB
111	P1033X111	LOCK ROD
112	PSB11M	CAP SCREW M8-1.25 X 16
113	P1033X113	TABLE ROLLER SHAFT
114	P1033X114	MIDDLE TABLE
115	P1033X115	GIB
116	PSS04M	SET SCREW M6-1 X 12
117	P6201ZZ	BALL BEARING 6201ZZ
118	P1033X118	TABLE ROLLER
119	P1033X119	LOCK HANDLE M12-1.75
133	PW06M	FLAT WASHER 12MM
134	PB33M	HEX BOLT M12-1.75 X 50
135	P1033X135	LEADSCREW NUT 15.5 X 41.5
136	P1033X136	LEADSCREW M10-1.25 X 400
137	P1033X137	COLUMN
138	P1033X138	BASE
139	P1033X139	CHAIN
140	P1033X140	IDLER BRACKET
141	P1033X141	SHAFT 15 X 34
142	P1033X142	SPROCKET

REF	PART #	DESCRIPTION
143	PR05M	EXT RETAINING RING 15MM
144	P6202ZZ	BEARING 6202ZZ
145	PR21M	INT RETAINING RING 35MM
146	P1033X146	SPROCKET
147	PW04M	FLAT WASHER 10MM
148	PN08M	HEX NUT M10-1.25
149	P1033X149	EXPANSION BAND
150	PS09M	PHLP HD SCR M5-.8 X 10
151	P1033X151	PIPE BAND
152	P1033X152	COLUMN
153	PR18M	EXT RETAINING RING 17MM
154	P1033X154	CRANK POST
155	P1033X155	PLATE
156	P1033X156	WORM GEAR
157	PR22M	INT RETAINING RING 38MM
158	P1033X158	BUSHING 14 X 20
159	PK05M	KEY 4 X 4 X 10
160	P1033X160	LEADSCREW M10-1.25 X 582
161	PS05M	PHLP HD SCR M5-.8 X 8
183	PAW03M	HEX WRENCH 3MM
184	PAW04M	HEX WRENCH 4MM
185	PAW05M	HEX WRENCH 5MM
186	PAW06M	HEX WRENCH 6MM
187	PWR810	WRENCH 8 X 10
188	PWR1214	WRENCH 12/14MM
189	PWR1719	WRENCH 17 X 19



Stand/Motor Parts Breakdown



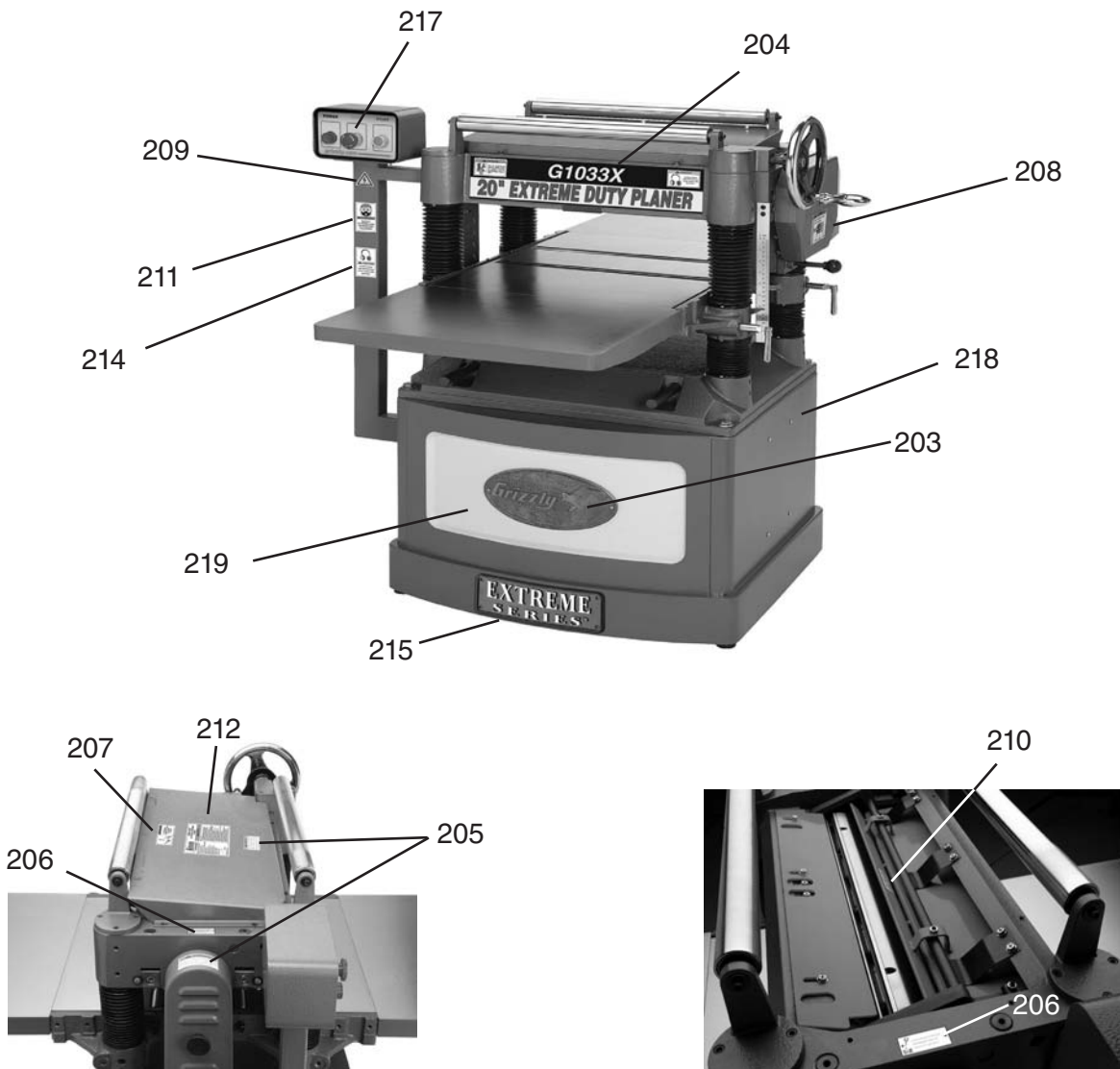
Stand/Motor Parts List

REF	PART #	DESCRIPTION
7	PFS02M	FLANGE SCREW M6-1 X 12
16	PW03M	FLAT WASHER 6MM
39	P1033X039	MAG SWITCH SDE MPE-30
39-1	P1033X039-1	CONTACTOR SDE MA-30 220V
39-2	P1033X039-2	MAG SWITCH FRONT COVER
39-3	P1033X039-3	OL RELAY SDE RA-30 22-34
39-4	P1033X039-4	MAG SWITCH BACK COVER
41	PSS14M	SET SCREW M8-1.25 X 12
73	PN09M	HEX NUT M12-1.75
92	P1033X092	FOOT
120	PFH06M	FLAT HD SCR M6-1 X 20
121	P1033X121	PANEL
122	P1033X122	CABINET STAND
123	P1033X123	FRONT COVER
124	PN06M	HEX NUT M5-.8
125	P1033X125	STRAIN RELIEF
126	P1033X126	START SWITCH
127	P1033X127	STOP SWITCH
128	P1033X128	POWER LIGHT
129	P1033X129	SWITCH PANEL
130	P1021X2145	SWITCH BOX
131	P1033X131	SWITCH ELBOW BRACKET
132	PS09M	PHLP HD SCR M5-.8 X 10
133	PW06M	FLAT WASHER 12MM
162	P1033X162	MOTOR BRACKET
163	P1033X163	COLLAR
164	PB15M	HEX BOLT M8-1.25 X 40
165	PN03M	HEX NUT M8-1.25
166	PW01M	FLAT WASHER 8MM

REF	PART #	DESCRIPTION
167	PN09M	HEX NUT M12-1.75
168	P1033X168	ADJUSTABLE BOLT 25.4 X 120
169V2	P1033X169V2	MOTOR 5HP 220V 1-PH V2.04.10
169V2-1	P1033X169V2-1	CAPACITOR COVER
169V2-2	P1033X169V2-2	MOTOR FAN COVER
169V2-3	P1033X169V2-3	MOTOR FAN
169V2-4	P1033X169V2-4	S CAPACITOR 250V 250M
169V2-5	P1033X169V2-5	R CAPACITOR 450V 35M
169V2-6	P1033X169V2-6	CENTRIFUGAL SWITCH
169V2-7	P1033X169V2-7	JUNCTION BOX
169V2-8	P1033X169V2-8	MOTOR LABEL
170	P1033X170	BAR
182	P1033X229	NYLOCK HEX BOLT M8-1.25 X 20
202	PS38M	PHLP HD SCR M4-.7 X 10
203	G8589	GRIZZLY NAMEPLATE-LARGE
220	P1033X220	STRAIN RELIEF
221	P1033X221	POWER CORD 10G 3W
222	P1033X222	STRAIN RELIEF
223	PTLW02M	EXT TOOTH WASHER 5MM
224	PS09M	PHLP HD SCR M5-.8 X 10
225	PS20M	PHLP HD SCR M5-.8 X 15
226	P1033X226	SWITCH PANEL
227	P1033X227	MOTOR CORD 10G 3W
228	P1033X228	SWITCH CORD 18G 4W
229	P1033X229	NYLOCK HEX BOLT M8-1.25 X 20
230	PW01M	FLAT WASHER 8MM
231	P1033X231	MOTOR PULLEY 28MM ID
232	P1033X232	MOTOR SHAFT KEY 8 X 7 X 55



Labels & Cosmetic



REF	PART #	DESCRIPTION
203	G8589	GRIZZLY NAMEPLATE-LARGE
204	P1033X204	MODEL NUMBER LABEL
205	P1033X205	WARNING LABEL-SHUT COVER
206	P1033X206	LUBRICATION LABEL
207	PLABEL-42	UNPLUG 220V LABEL-HORIZ.
208	P1033X208	FPM LABEL
209	PLABEL-14	ELECTRICITY LABEL
210	P1033X210	ADJUST SCREW LABEL

REF	PART #	DESCRIPTION
211	PLABEL-37	RESPIRATOR/GLASSES LABEL
212	P1033X212	MACHINE ID LABEL
214	PLABEL-15	EAR PROTECTION LABEL
215	H7942	EXTREME SERIES PLATE
217	P1033X217	CONTROL PANEL LABEL
218	PPAINT-1	PAINT-GRIZZLY GREEN
219	PPAINT-11	PUTTY TOUCH UP PAINT

WARNING

Safety labels warn about machine hazards and ways to prevent injury. The owner of this machine **MUST** maintain the original location and readability of the labels on the machine. If any label is removed or becomes unreadable, **REPLACE** that label before using the machine again. Contact Grizzly at (800) 523-4777 or www.grizzly.com to order new labels.





WARRANTY CARD

Name _____
 Street _____
 City _____ State _____ Zip _____
 Phone # _____ Email _____ Invoice # _____
 Model # _____ Order # _____ Serial # _____

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

Advertisement Friend Catalog
 Card Deck Website Other:

2. Which of the following magazines do you subscribe to?

<input type="checkbox"/> Cabinetmaker & FDM	<input type="checkbox"/> Popular Science	<input type="checkbox"/> Wooden Boat
<input type="checkbox"/> Family Handyman	<input type="checkbox"/> Popular Woodworking	<input type="checkbox"/> Woodshop News
<input type="checkbox"/> Hand Loader	<input type="checkbox"/> Precision Shooter	<input type="checkbox"/> Woodsmith
<input type="checkbox"/> Handy	<input type="checkbox"/> Projects in Metal	<input type="checkbox"/> Woodwork
<input type="checkbox"/> Home Shop Machinist	<input type="checkbox"/> RC Modeler	<input type="checkbox"/> Woodworker West
<input type="checkbox"/> Journal of Light Cont.	<input type="checkbox"/> Rifle	<input type="checkbox"/> Woodworker's Journal
<input type="checkbox"/> Live Steam	<input type="checkbox"/> Shop Notes	<input type="checkbox"/> Other:
<input type="checkbox"/> Model Airplane News	<input type="checkbox"/> Shotgun News	
<input type="checkbox"/> Old House Journal	<input type="checkbox"/> Today's Homeowner	
<input type="checkbox"/> Popular Mechanics	<input type="checkbox"/> Wood	

3. What is your annual household income?

\$20,000-\$29,000 \$30,000-\$39,000 \$40,000-\$49,000
 \$50,000-\$59,000 \$60,000-\$69,000 \$70,000+

4. What is your age group?

20-29 30-39 40-49
 50-59 60-69 70+

5. How long have you been a woodworker/metalworker?

0-2 Years 2-8 Years 8-20 Years 20+ Years

6. How many of your machines or tools are Grizzly?

0-2 3-5 6-9 10+

7. Do you think your machine represents a good value? Yes No

8. Would you recommend Grizzly Industrial to a friend? Yes No

9. Would you allow us to use your name as a reference for Grizzly customers in your area?

Note: We never use names more than 3 times. Yes No

10. Comments: _____

CUT ALONG DOTTED LINE

FOLD ALONG DOTTED LINE



Place Stamp Here



GRIZZLY INDUSTRIAL, INC.
P.O. BOX 2069
BELLINGHAM, WA 98227-2069



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Send a Grizzly Catalog to a friend:

Name _____
Street _____
City _____ State _____ Zip _____

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WARRANTY AND RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

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